DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1919, No. 49

EDUCATION IN PARTS OF THE BRITISH EMPIRE

[Advance Sheets from the Biennial Survey of Education, 1916–1918]

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919

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EDUCATION IN PARTS OF THE BRITISH EMPIRE.

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EDUCATIONAL DEVELOPMENTS IN THE DOMINION OF CANADA.

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GENERAL EDUCATIONAL ACTIVITIES.

Certain educational activities are common to most, if not all, of the Provinces of the Dominion; and these will be considered in their general bearings before the local and individual problems of the several Provinces are taken up. Chief of these general movements are the following:

THE LANGUAGE ISSUE.

Having its roots deep in what is perhaps the greatest diversity of racial origins in the world, Canada's problem of solving the question of permitting the establishment and maintenance of schools giving instruction in other tongues than English presents difficulties even more complex than in any State of the American Union. According to immigration statistics, Canada has within the past 10 years

received waves of immigration from 26 distinct racial entities. Fortunately, there is not to be noted a corresponding number of divisions of the language problem. The great majority are too few in number to segregate themselves solidly apart from the English and French populations. The groups which distinctively show and carry out such a tendency are the German, Polish, and Ruthenian. The bearings of the question on the social, economic, and political sides are, of course, manifold; but this treatment concerns itself only with its bearings upon education, and essentially upon the elementary phase. This field alone shows such diversity in the ways the problem must be solved by the individual Provinces as to call for a survey separately or by groups.

The situation in the Maritime Provinces of Prince Edward Island, New Brunswick, and Nova Scotia may be dismissed with slight notice. This group differs fundamentally from all the others in being essentially homogeneous in population. From considerations of geography, climate, and pursuits, immigration has uniformly passed them by. The situation is therefore the simple one of rivalry between the French and the English language. Despite a large proportion of Acadians left in each of these three Provinces, the religious and educational relations between the French and English have always been so amicable, and legal compromises have been so skillful, as to forestall all friction. Nova Scotia's settlement of the problem may be taken as typical. In that Province a special inspector (an Acadian) is provided for Acadian schools; brief summer courses in colloquial English are provided in the Provincial Normal College at Truro for French-speaking teachers; in the first four grades French readers are provided for French-speaking children, with instruction in colloquial English, and English-speaking teachers are not required to know French.

Proceeding westward, Quebec presents the problem of bilingual instruction distinctively along the line of religious faith; and her solution is eminently satisfactory of what might be, with less tactful handling, the most dangerous combination of religious and racial jealousies. The general line of cleavage adopted is, as may be expected, English for and in the Protestant schools, and French for and in the Roman Catholic schools, though a confusing element intervenes in the English-speaking Irish population of Quebec and Montreal. By wise provisions of the Protestant committee of the provincial board of education, French courses of study are included in those of the Protestant schools, being required from the fourth to the eleventh grade, and in the comparatively few French Protestant schools French is the language of instruction, with required courses in English. Similarly, the committee of Catholic schools

provides for the use of French for instruction, and requires English from the first year in the great majority of such schools; and in the Catholic schools of Irish and English communities the converse provision is made. In the populous centers some Catholic schools use one language for instruction in the morning and the other in the afternoon; and in the Catholic superior schools the training in English is notably fine. The key which simplifies the situation is that the racial elements in Quebec are locally distinct. The hope expressed by the superintendent of public instruction the month the war broke out that local good sense and patriotism would overcome any difficulty has been amply fulfilled.

Geographically and in population Ontario has many points of resemblance to Quebec; but an important dissimilarity lies in the overwhelming majority of the English-speaking population (about 2,000,000) over the minority of all those speaking other languages (about half a million). Without anticipating the treatment of the strictly educational system of Ontario, it may be said that, barring the independence of religious schools found in Quebec, Ontario allows much the same language privileges to the minority. Historic traditions of sentiment and race loyalty clustering around the city of Quebec have always deeply impressed the French-speaking population in Ontario as well, and this feeling is even intensified by their being unable to have enacted into law such concessions as those enjoyed by their kinsmen in the Province of Quebec. Furthermore, a steady tide of the latter set in a generation ago into Ontario. The displacement of English-speaking farmers that followed served still further to widen the breach of race and language. Regulations of increasing severity requiring the teaching of English in all schools, passed by the Department of Education on the basis of recommendations made by a commission of inquiry, led in 1915 and 1916 to acute and in some localities disastrous situations in French schools and school boards. The trouble was settled in November, 1916, by the judgment of the Privy Council of the Dominion, which held that the right to the use of a certain language concerns only legislative or court use, and does not relate to education, but that the right to manage schools, as well as that to determine the language to be used in them, are alike subject to the regulations of the provincial education department.

In sharp contrast to the homogeneous character of the Maritime Provinces and to the absence of a serious language problem there, the prairie Provinces of Manitoba, Saskatchewan, and British Columbia show great racial diversity, due to successive waves of immigration which followed each other too rapidly to be assimilated. In Manitoba's estimated one million people are to be counted 19 racial units not speaking English, of which 6 number more than 50,000

each, with the aggregate estimated at 60 per cent of the total population of the Province. Some idea of the race diversity may be gained from the statement that the Bible is sold in Winnipeg in 58 different dialects. Of those speaking a language other than English, the most serious problem is presented by the German Mennonites, the Poles, the Russian Doukhobors, and the Ruthenians.

Manitoba, largely under the influence of the educational thought of the States of the American Union just to the south, frankly made no legal allowance for any system of public instruction other than the purely nondenominational; and she could therefore offer no such solution of the language problem as that reached by Quebec and Ontario. In 1896 a compromise was adopted by which, in localities where 10 pupils spoke French or other language than English (predomantly Mennonite), bilingual teaching must be provided; but the French Roman Catholics were not satisfied, and at Winnipeg and Brandon maintained separate parochial schools, besides paying regular taxes for public schools.

When the tremendous tide of immigration set in about 1902, each racial group took advantage of its legal rights under the above compromise. The climax was reached in 1915 when nearly one-sixth of the schools of Manitoba were bilingual—143 teaching French, 70 German, 121 Polish or Ruthenian, all in addition to English. The unwisdom (noted at the time) of the failure to adopt compulsory school attendance in Manitoba was now made apparent, especially in Ruthenian communities. The first relief afforded was the outright repeal (1915) of the clause requiring bilingual teaching when demanded by the parents of as many as 10 children. In Manitoba, then, as the situation now stands, no more bilingual teaching certificates are issued, and present holders are permitted to teach on the old ones until June, 1919, when they will be invited to qualify for regular certificates. English examinations for entrance to normal schools have been required since 1917, the substitutes of French or German grammar and composition having been abolished.

In Saskatchewan matters are similar to those in Manitoba. Of the alien elements, the Colony Mennonites, the Colony Doukhobors, the Ruthenians, and the Germans retarded unification by declining to send their children to the public schools which the law provides that the community itself may organize. Educational and social leaders have thought it best not to compel them, but to wait for the influence of new-world surroundings and the example of the independent branch of each religious sect to do their disintegrating work. The Ruthenians, who constitute the largest population in the northern part of the Province, and the Mennonites, among whom entire communities formerly evaded the law by simply not organizing the legal school district but establishing private parochial schools, offer

each of them distinctive phases of the problem to be solved. Over these the provincial inspectors had up to 1917 no power whatsover. The new school-attendance act of that year, however, gave the department of education power to investigate all nonpublic schools and to apply legal pressure when needed, though the law leaves a serious loophole for evasion in not requiring "the parent or guardian to send the child to public school if the child is under instruction in some other satisfactory manner." Controversy over the interpretation of this clause must continue until further legal action settles it.

In Alberta the very large number of groups speaking other languages than English led to the appointment in 1914 of a supervisor of foreign schools, vested with large power of supervision and interference. Here, as elsewhere, the Ruthenian group gave most trouble, as they clung most tenaciously to their parochial schools. Because of the widely varying degrees of excellence found in the latter, the Government has steadily refused to recognize attendance at such schools as fulfilling the compulsory educational requirements. This policy, tactfully and yet unswervingly adhered to, has resulted in the closing of almost all the Ruthenian schools and of many German-Lutheran private parochial schools conducted by theological students from Lutheran colleges in the United States, which were considered as not reaching the prescribed standard of efficiency.

Last of all, and strange to say, parallel to the situation in the Maritime Provinces of the east, the extreme western Province of British Columbia presents no language problem, though showing wide diversity of racial groups, each of which is so small in numbers as to offer no trouble in the matter of language instruction in the public schools.

It may safely be concluded that the question of the language of instruction throughout the Dominion has steadily tended to a satisfactory adjustment since its injection as an issue of extremely bitter controversy six years ago. At one time threatening to disrupt boards and schools, notably in Ontario, it came to have applied to it the spirit of fair play characteristic of western democracy, and the general principle of the rule of the majority, tempered with concessions to local sentiment.

AGRICULTURAL INSTRUCTION.

Federal interest in agriculture has expressed itself in two parliamentary enactments:

1. The Agricultural Aid Act, passed in 1912, by the provisions of which the sum of $500,000 was distributed among the Provinces of Canada on the basis of population. While partly educational, the objects of this grant were also of a general social and economic character, with rural conditions fundamentally in view.

2. The Agricultural Instruction Act, passed in 1913, by the provisions of which ten million dollars was set apart to be divided among the Provinces for agricultural instruction during the ten years ending March 31, 1923. As the name implies, this act is preeminently educational, and its work falls under four divisions:

(1) The teaching in the public schools of the first principles of the sciences related to agriculture.

(2) The teaching of more advanced agriculture in agricultural colleges and schools devoting their attention to the training of teachers, investigators, and community leaders.

(3) The carrying on of extension work, having for its object the instruction of farmers by acquainting them through demonstrations and by other means with the results of scientific investigation and research.

(4) The amelioration of the conditions of rural life, particularly in so far as women and children are concerned.

These objects have been variously carried out in the several Provinces, but in them all the nature of the stimulus given to agricultural instruction has been much the same, being guided by the advice of local authorities who have in view urgent local and provincial needs.

VOCATIONAL WORK FOR RETURNED SOLDIERS.

The care of the returned Canadian soldier has devolved entirely upon the Military Hospitals Commission, established and given extensive powers by successive orders in council. This commission works together with a committee of both houses of the Canadian Parliament in the training and reeducation of wounded, disabled, and convalescent soldiers. In the system adopted, the training for new occupations of men who can not resume their former occupations—vocational reeducation—is the phase of deepest educational significance. Under this head, and responsible to the commission first named, nearly every Province has the following organizations:

1. A Provincial Disabled Soldiers' Training Board, which determines who are fit subjects for vocational reeducation.

2. A body having generally advisory powers for securing the coordination of local efforts and the cooperation of educational institutions.

3. Vocational officials in immediate charge of work in each locality under the Vocational Secretary of the Dominion, with headquarters at Ottawa.

4. Various organizations, such as the Returned Soldiers' Employment Commission, which have charge of placing the men in breadwinning occupations.

The efficiency with which all these agencies cooperate necessarily varies widely in the several Provinces; perhaps the finest illustration of the practical working of the general plan is to be seen in the

western Province of Alberta, from which many of the first enlistments in the Canadian expeditionary force came. At the Military Convalescent Hospital at Ogden, military organization and discipline prevail. In addition to systematic treatment involving occupational therapy of the most modern type, specialized vocational reeducation is given in—

(1) Commercial courses of six months;

(2) Instruction of disabled soldiers, foreigners who had enlisted in the Canadian forces, in English;

(3) Civil-service examination courses;

(4) Manual arts;

(5) Gardening and poultry raising;

(6) Industrial trades along the line of the vocational survey of the Province of Alberta projected just as the war broke out, with instruction at the Provincial Institute of Technology and Art at Calgary, organized as a link in the general system of public instruction in Alberta, and for the present turned over exclusively to disabled soldiers.

Many problems of vocational training are here being worked out with remarkable success. The caliber of the students and the relation between them and the educational authorities may be seen in the fact that a students' council at the institute has powers of self-government, works out programs of study, recently voted for in increase in daily hours of work, and has frequently been asked for advice on the contents of courses. In March, 1918, the vocational training branch of the Provincial Invalid Soldiers' Commission had under its instruction more than 3,000 returned soldiers.

Dominion-wide interest in this world problem did not cease with the cessation of hostilities. At the convening of the Canadian Parliament in February, 1919, it was announced in the speech from the throne that bills would be submitted for the further promotion of vocational education in all its phases, and that a recent order in council had provided substantial increase of vocational pay and allowances to returning soldiers while undergoing such reeducation.

THE DOMINION EDUCATIONAL ASSOCIATION.

Perhaps the most vital bond of union between the Provinces from the point of view of teaching is the Dominion Educational Association. This includes representatives from each Province, meets annually in November, in Ottawa, and constitutes a clearing house for the interchange of educational ideas, besides contributing substantially to the growing federalistic consciousness. A few of the salient subjects discussed at its 1918 meeting will show the very valuable part it serves in educational progress: "The Improvement of School

Administration and Its Dependence on Changes in Legislation"; "The Fisher Bill of England"; "The Adolescent School Attendance Act of Ontario"; "Uniform Textbooks for Canadian Schools"; "The Relation of Technical to Complete Education"; "Education for the New World after the War"; "The Returned Soldier—What Can We Do for Him?"; "The Federal Government and Statistics on Education in Canada." Of late years it has invited leading educational thinkers of the United States to address it, notably the Commissioners of Education, and thus has come to have a distinctly international character.

THE MARITIME PROVINCES.

The three Provinces of New Brunswick, Nova Scotia, and Prince Edward Island, by reason of similarity of climate, industries, and population, constitute a distinct unit. Their educational problems and methods of solution are closely akin, as is evidenced by the flourishing maritime educational convention held annually for the discussion of topics of common importance, and marking each year a distinct growth toward solidarity. In many respects New Brunswick may be regarded as most progressive; and a survey of educational progress there will be largely representative of the other two. As in all the other Provinces, the service of the teachers and the educational machinery in the winning of the war continued unabated until the end, especial interest being taken in the organization of the Dominion work in education for Canadian soldiers overseas and in the projected establishment of educational facilities in England for soldiers detained there after the war.

The school laws passed within the two years showed marked increase in educational interest. The powers and responsibilities of school trustees were largely increased; the attendance of district representatives upon county or provincial teachers' or trustees' institutes was encouraged by defraying their expenses; reciprocity of teachers of corresponding grades with Nova Scotia, safeguarded by the certification of one of the other superintendents of instruction, was established; and superior schools in the seventh grade and upward were declared free to all pupils residing within the parish or parishes concerned. Most important of all, however, is the legislative act of 1918, defining vocational and prevocational education and schools, providing for provincial and local administration and control by a committee consisting of the Superintendent of Education, the Principal of the Normal School, the Secretary of Agriculture, the Director of Elementary Agricultural Education, and three others, including one representing capital and one labor, outlining the method of establishing schools and departments of vocational education, allowing provincial grants on the basis of equal appropria-

tions of local taxes for designated instructions in this field; and finally, providing that no part of the annual vocational grant shall be given to any district, town, or city unless a compulsory school-attendance law has been adopted therein.

Closely related is the project having for its object the establishment of home efficiency clubs throughout the Province and the stimulation of the production of home-canned fruits and vegetables. Upon the inauguration of the system late in 1917 one hundred clubs were formed, with a total membership of 1,700 girls between the ages of 10 and 18 years. The aggregate production of these clubs was estimated in 1918 at 50,000 quarts of food canned or otherwise preserved. In May, 1918, the Board of Education formally recognized the movement by the appointment of a woman supervisor for girls' clubs. This official by the end of 1918 had over 200 active organizations under her direction. A striking feature of the movement also was the fact that many domestic-science teachers of the Province volunteered to help in this general work by giving up three weeks of their summer vacation. In 1918 these teachers were regularly employed by the Department of Education to visit the clubs during July and August. In preparation for this, short courses were provided in the normal school, with special regard to the local products and conditions of the districts to which individual teachers were assigned.

In the matter of increased production the Dominion-wide movement was promoted in New Brunswick by the schools in cooperation with the agricultural department. The inspectors were summoned to a conference, and the Province organized by the selection of the most suitable centers in each inspectorial district and the appointment of a committee in each. A stimulus was given to good scholarship by the provision that only boys whose school standing was satisfactory should be allowed to volunteer for this work.[1] Assistance was also lent by the Department of Education through the district organizations in the distribution of circular and seed-card estimates sent out by the Department of Agriculture.

With the purpose of securing data at first hand upon the extent and methods of free textbook distribution—always a much-mooted question in the Dominion—the superintendent of education in 1917 visited all the western Provinces, and embodied his findings in a report containing many other points of interest besides that of his immediate object. He found that free readers were supplied in all the Provinces west of Ontario, and free materials in some, free arithmetics, agriculture texts, atlases, and libraries in others; that Ontario supplied hand-books in each subject to each

[1] Similar departmental regulations were also issued in Nova Scotia.

teacher; that British Columbia was the only Province supplying free textbooks throughout; that in Manitoba each district or municipality was allowed by law to supply its own texts free, with the prospect that this would shortly become compulsory; that an interesting sign of closer unity was seen in the fact that the four western Provinces had tentatively agreed to appoint composite committees to select uniform textbooks for all.

NOVA SCOTIA.

Noteworthy in the educational history of Nova Scotia is the regulation adopted by the council of public instruction, compulsory from August 1, 1919, guaranteeing the raising of teachers' salaries and basing the minimum salary upon the average annual salary paid for the five years ended July, 1917. Ranging from $200, the lowest hitherto paid, up to $750, increases are graduated according to various percentages, assuring a minimum of $400 in future. The act is effectively safeguarded by the provision that—

> the license of any teacher engaging to teach in any section at a less salary than that defined above shall at once be suspended, and if any section engage a teacher at less salary than the above specified, such section shall forfeit its share of the muncipal fund and shall not be regarded as having a legal school.

PRINCE EDWARD ISLAND.

Legislation in this Province showed marked progress in the following amendment to the section of the Public Schools Act designating the requirements of voters at school meetings:

> Notwithstanding anything in this act or amendments thereto, every married woman or widow having one or more children of school age in actual attendance at the school shall be a qualified voter at all school meetings in respect of all matters and things cognizable by a school meeting and shall be eligible for election as school trustee.

In accordance with this amendment women have been elected and promptly qualified and have thus come in closer touch with the needs and improvement of the schools.

The compulsory attendance clause of the school act has also been strengthened by the following amendment:

> Every person having under his control a child between the ages of 8 and 14 shall annually during the continuance of such control send such child to some public school in the city, town, or school district in the county in which he resides at least 30 weeks if such person resides in the town of Charlottetown or Summerside and 20 weeks if he resides elsewhere in the Province.

The enforcement of this provision was made obligatory upon all boards of trustees.

QUEBEC.

Any adequate survey of educational progress and conditions in the Province of Quebec must be based upon a clear understanding of the unique legal character of its public school system. This includes a twofold organization which follows sharply the lines of the two dominant religious faiths, with each division entirely independent of the other. The final control and direction of the Roman Catholic schools are vested in the Catholic committee of the council of public instruction; those of the Protestant schools in the corresponding Protestant committee. Both are under a common superintendent of public instruction for the Province, who is ex-officio chairman of both, though he usually delegates the actual power in one or the other committee, and to whom each inspector general submits an annual report for transmission to the secretary of state. Each committee works primarily through its inspector general, whose powers are entirely derived from it. In matters of common import the committees combine either in whole or in part.

The great majority of the schools of all grades in the Province are Roman Catholic—in 1916–17, 6,562 out of a total of 7,289, enrolling approximately 430,000 pupils out of a total of 500,000. Among the administrative acts of the Catholic committee for the past two years was their declaration in favor of forming classes to prepare young pupils for the first-year course of study in the primary schools, and the issuance of a certificate of studies upon the completion of the elementary, intermediate, and superior courses:

> There is question at this time of a new distribution of the subjects included in the courses of the elementary and model schools, in such a way as to eliminate those which are not absolutely necessary for these schools, and to distribute the subjects over seven years of teaching.

The Catholic committee also instructed its inspector general to initiate a close investigation of the condition and needs of the Catholic schools of the Province, and early in 1917 he made the following recommendations:

1. That the course of study in elementary schools be more effectively carried out, rather than have additions of subjects or time.

2. That the importance of the training of very small children in preparation for the first grade of elementary course be recognized and more attention be paid to it.

3. That the men and women teachers of the Province be stimulated to greater professional efficiency both in preparation and in permanency in the same school.

4. That the number of schools under the direction of male teachers be increased in all possible ways.

5. That the maximum number of pupils in each class should be reduced from 50 to 40.

6. That a certificate of study should be conferred as a reward for work both to teachers and to pupils, and with the view of encouraging the latter to pursue their studies beyond the prescribed 13 years.

Among the administrative acts of the Protestant committee were: The indorsement and transmission to the Government of the provision for compulsory education for Protestant children, along the line of the petition of school commissioners of certain towns unanimously presented to the legislature of the Province and the unanimous motion of the Protestant Teachers' Convention, the Council of Public Inspectors, the Provincial Association of School Boards, and a few Catholic local school boards; the revision of laws relating to the employment in industries of children who had not passed a certain scholastic standard; and the thorough revision of school books and courses of study for the year ending June, 1920, in order to meet adequately the conditions brought about by the war.

Each committee has been fortunate in the activity and vigor of its inspector general. In 1917 the Catholic inspector general, in addition to the investigation outlined above, noted as encouraging signs the growth in interest shown by the local school commissions, due largely to the conscientious labor of the local inspectors; the decrease in the number of women teachers without diplomas by exactly half within the past five years; the increase in salaries such that those from $100 to $125 have practically disappeared and that the average salary has come to range from $200 to $300, being almost doubled in the past six years; the resolution passed by the Roman Catholic inspectors, and indorsed by the Protestant inspectors, calling upon the committees for such a raising of the minimum standards of the rural schools as would qualify all these to participate in the minimum salary grants.

Both Catholic and Protestant committees during 1917 and 1918 initiated the holding of campaign meetings throughout the Province to promote public interest in education, urging the voting of money for improved buildings and higher salaries. The Protestant inspector general noted a most encouraging awakening of popular interest in many localities in improved school facilities, but emphasized the urgent need of better salaries for rural teachers, if any with diplomas were to continue to be available; and he called for a minimum salary of $50 per month, which would not be unduly burdensome in view of the new tax assessments made in 1918 in many localities. He concluded:

The economic reasons are not confined to the facts that trained teachers are allured to other Provinces where the reward is greater; young women of

ability are constantly afforded more attractive careers in our own Province as trained nurses and as stenographers and typewriters in banks and business offices. The war has intensified this demand, and an inadequate supply of trained teachers is not only evident now throughout the Province, but is bound to become still more inadequate in the immediate future. * * * The example of the British Parliament in adopting a great progressive educational policy involving increased expenditures in war times is one to be followed.

ONTARIO.

THE SUPERANNUATION ACT.

The most important piece of educational legislation of the Province of Ontario during the past two years was the teachers' and inspectors' superannuation act. Its main provisions are as follows: (1) The assessment of 2½ per cent upon the salaries of teachers and inspectors with an equal sum contributed by the Province, the said payments to be deducted from the legislative school grants and to be placed to the credit of the superannuation fund, and to be deducted finally from the individual salaries; (2) pensions based on length of service and amount of salary, the minimum being $365, and the maximum $1,000 per annum, with the requirement of a minimum of 30 years' experience or 15 years if retirement is caused by ill health; (3) a controlling board composed of an actuary, two other persons appointed by the minister of public instruction, and two teachers or inspectors, active members of the Ontario Educational Associaton and regularly elected by that body.

PROPOSED LEGISLATION.

Of great importance, also, is the introduction of the following bills in the legislative assembly of the Province:

1. The bill for the establishment of a system of consolidated schools, following closely the lines of corresponding legislation in the prairie Provinces, where such schools have for some years constituted the basal feature of rural school administration. It is still (April, 1919) pending, but is regarded with universal favor, and is certain to pass. It marks a long step forward in elasticity of rural school administration.

2. The adolescent school attendance bill, making compulsory part-time school attendance of boys and girls between the ages of 14 and 18. It provides that adolescents between 14 and 16 must have 400 hours of education each year, and those between 16 and 18 have 320 hours, and that they can not secure employment unless they shall have obtained certificates that they have complied with the law or are exempt for legally specified cause. Urban centers of 5,000 population or over must provide for adolescent school courses.

THE EFFECTS OF THE WAR.

As regards the practical operation of the schools of Ontario, the effects of the war have been pronounced in the following respects:

1. In diminishing the normal supply of teachers. According to the report of the chief inspector of public and separate schools, not only have—

> A considerable number of teachers enlisted for service overseas, but a much greater number have withdrawn to more lucrative positions with fewer responsibilities. The loss to the Province, not counting the cost of educating these teachers, is sufficient to cause serious alarm to the authorities of the elementary schools. The obvious and manifest remedy for this state of affairs is to insist that boards of trustees shall adjust the salaries of their teachers to the increased cost of living and to the increased wages now earned in other occupations. Unless a very considerable increase in salaries of teachers is made, a still more serious condition will arise. Not only will the service of the teachers now engaged be lost, but students will cease to be attracted to the teachers' training schools.

2. In decreasing the amounts expended for the improvement and construction of school buildings. The inspector just quoted, however, finds a compensating advantage which has made for better school buildings and better school grounds, viz, the better organization of community life and a tendency to regard the school as its center, a movement which had its beginning in the demand made by the war for a higher standard of physical efficiency and its revelation of hitherto unsuspected but widely prevalent physical defects through the reports of the Army medical examiners.

3. In increasing the difficulty of securing the punctual and regular attendance of pupils at schools. On this point the same inspector reports that the arrangements effected by regulation two years ago in view of the exigencies of the war have left something to be desired in the way of more specific regulations to compel attendance. The truant officer provision has not been found satisfactory: "With the increased cost of wages the temptation for parents to withdraw their children from school, especially where fruits and vegetables are grown, has necessarily increased."

CONTINUATION SCHOOLS.

The continuation schools have grown steadily during the past two years. In spite of difficulties of accommodation and equipment, the favoring regulations and the liberal system of provincial grants made to this type of school have advanced their usefulness, though with the confusion incidental to the war only the largest centers have as yet such schools in full operation. The inspector of the district which enrolls the largest number of such schools advocates making it obligatory that every continuation school employing two teachers

and every high school having four teachers or less shall establish departments of agriculture and household economy giving a two-year course and winter courses in each; that schools with a staff of more than six teachers shall establish departments of technical training and household economy; provision should be made for training a sufficient number of the best available teachers, the burden of expense being distributed over the muncipalities that derive benefit from such a school, and attendance of pupils for the greater part of the time between the ages of 14 and 17 being made compulsory.

For the past two years the decrease in the attendance of boys upon the continuation schools has been noticable, more particularly among the first-year pupils, attributable to the great scarcity of labor on the farms, necessitating the work of the larger children at home. In industrial centers the decrease is due to the attraction of high-school boys and girls to employments paying high wages. According to the report of the inspector of the district, which shows more distinctively rural conditions:

> The continuation schools when first established were expected to provide secondary education for the youth of the rural and village communities of the Province, and so had a strong tendency toward training for country life by means of making agriculture one of the chief subjects of study. Unfortunately, these schools have not to any great extent fulfilled such expectations. Instead, these schools are simply high schools in rural or village communities, with courses similar to those in the city high schools and fitting youths for the teaching profession and for entrance to the universities and professional colleges.

INDUSTRIAL AND TECHNICAL EDUCATION.

Though the full development of the various types of schools contemplated by the industrial education act of 1911 was interrupted by the war, representatives of every type provided for by it have been established: Day schools, including general industrial schools, technical high schools and high-school courses, part-time cooperative industrial courses for apprentices actually employed, and schools and courses for instruction in the fine and applied arts; and night schools distinctively for adult workers. The needs of the war have brought special emphasis to bear upon the instruction for apprentices. Public-spirited employers in some places have offered tangible inducements to attend classes in mechanical drawing and shop mathematics, and in one instance managers allow one month to be deducted from the year's apprenticeship for a faithful winter's work in night-school classes upon these subjects. War needs have also brought to the front the value of classes for women in domestic science.

But perhaps the greatest progress in industrial and technical education has been made in the development of the day schools,

reaching as these do boys and girls under 14 who can not be given such training in the public schools, and who have not the maturity of mind to do successful night-school work. This branch of education has also received great stimulus from the attendance of returned soldiers in trade and technical classes, this having been affected by arrangements with the Dominion agencies already mentioned, which used the already established courses for the re-education of disabled soldiers.

AGRICULTURAL EDUCATION.

Mention has been made of the disappointment felt in certain quarters over the failure of the continuation schools, as originally contemplated, to develop agricultural instruction as its chief feature in rural schools. According to the report of the inspector of elementary agricultural classes, this type of instruction has steadily overcome difficulties, and wherever it has been established as a regular subject of the public-school curriculum it has maintained itself and steadily grown in public favor. Perhaps the most conspicuous proof of the part agricultural education is coming to play in the Province is seen in the school fair exhibits held in the rural districts, and serving by means of the appeal to local productions, interests, and the awarding of prizes for excellence along agricultural lines, to arouse and maintain a social solidarity unknown until their introduction. By regulation school fairs are formally organized under the direct charge of the district representative of the department of agriculture of the county in cooperation with the public school inspector. According to the report of the supervisor of district representatives:

> The special features in many places are the live-stock judging competitions, for teams of three boys from each school, who are asked to judge two classes of live stock, generally beef or dairy cattle and heavy horses; the public-speaking contests in which from 2 to 10 boys and girls compete; the boys' and girls' driving contests, which include rapidity and skill in hitching and unhitching; the school fair parades; physical drill under the Strathcona trust; weed and apple naming contests, and the exhibition of calves and colts by boys who had spent considerable time training their pet animals.

The call made each spring for increased food production, issued by the ministers or superintendents of public instruction throughout the Dominion, resulted in Ontario as elsewhere in a tremendous stimulus to formal instruction in agriculture. A large number of the schools undertook school garden work for the first time with very gratifying results. By ministerial regulation the duties of inspectors were still further increased in the promotion of agriculture, horticulture, and manual training and domestic science especially adapted to the requirements of farm life, and it was made the duty of each public

and separate school inspector to inspect half-yearly the teaching of agriculture and horticulture in the schools of his inspectorate, and to make a special report thereon to the minister and the school boards. By the regulation of 1918, special grants were offered to school boards and teachers of lower and middle schools for satisfactory work in agriculture and horticulture, and to rural and village schools for classes maintained in manual training as applied to the work of the farm or in household science suitable to the requirement of rural districts, where a qualified teacher is employed, and accommodations, equipment, and a course of study approved by the minister are provided.

MANITOBA.

DEMOCRATIC METHODS.

The transition is abrupt from the close centralization of the public school system of Ontario to the thoroughly democratic system of Manitoba. Each is the outcome of peculiar social and political conditions. In Manitoba, as in the adjacent sister Provinces of Saskatchewan and Alberta, conditions of life are largely rural, and they have fashioned educational machinery to their own liking. The unity of the interests of these three Provinces is so generally recognized that in May, 1918, their ministers and deputy ministers met at Calgary, in Alberta, adopted uniform textbooks in most of the public and high school courses, and provided for a training course for teachers of the first and second class certificate which should be 33 weeks in length, the completion of grades 11 and 12 being prerequisite to admission to it.

Contrary to the municipal unit, which is the basis in the Provinces to the eastward, the unit of educational organization in Manitoba is the school district, ranging in area from 16 to 25 square miles, with the legal provision by which the district can be organized with 10 school children. The several district and municipal boards have absolute power in the financial support and physical upkeep of the schools and in the selection of teachers, subject only to the general supervision of the ministry of public instruction. Remarkable elasticity in administration is secured by the provision of the public-school act by which a municipal school board may be established in any municipality where the electors so desire. In addition, any rural council may, and on petition of 15 per cent of the electors shall, submit a by-law at any municipal election for the purpose of ascertaining the wishes of the people in the matter, upon the passing of which law trustees are elected who are required to take over the whole matter of administration of the schools, the original school districts being dissolved, and the new board possessing all the powers provided in the act for boards of rural school trustees.

An important feature of the latter is the appointment of an official trustee to take charge of school districts which can not be satisfactorily managed by a regular board of school trustees. This system has been attended with marked success; and in the work of organization and management the services of the official trustee have in many cases proved invaluable. The trustees in their turn have combined during the past two years in provincial and local associations, opening the way to united action along many lines and securing a broad attitude toward educational problems which would otherwise have been impossible or at least long delayed. The activities of the official trustees have been especially commended by the inspectors of the districts. The Manitoba Educational Association has recognized the great part they play and has created a special section known as the trustees section of the association.

THE ADVISORY BOARD OF EDUCATION.

On the academic and scholastic sides a unique feature in the systems of the western Provinces is the advisory board of education. In Manitoba this organization dates from 1890, and is regarded by the people of the Province as having furthered the progress in education more largely than any other agency. With its activities it has grown in membership from 7 to 31, one-third of whom in 1916 had served in various departments of practical educational work, and the remainder represented agriculture, the industries, and the professions. The board touches practical education most closely in the following respects:

1. It grants to teachers professional certificates, and has steadily raised the requirements therefor, culminating in the regulation effective July 1, 1916, which requires candidates for normal school teacher training to have completed three years of high-school work, thus making the scholastic preparation of teachers identical with that required for entrance to other professional schools; by regulation of 1917 it decreed that no permanent license should be granted any teacher who is not a British subject by birth or naturalization, all others being allowed only an ad interim certificate valid for not more than six months, renewable for no longer period and requiring a special oath; it further discontinued the authorization of school texts for bilingual teaching in the public schools.

2. The board has charge of the courses of study of the public schools of all grades, and has steadily made more rigorous the combined course of study first adopted in 1913, which constituted a great step toward unifying educational interests in the Province by satisfying the requirements of both the University Council and the Normal School.

CONSOLIDATION.

The most conspicuous feature of education in the western Provinces is the consolidation of rural schools at convenient centers, a measure practically unknown in the eastern Provinces of the Dominion, but of very rapid growth in the Provinces which are under the educational influence of the States of the American Union. The advantages incident to the consolidation of schools have from the first been thoroughly appreciated in Manitoba; more and better teachers, modern and hygienic buildings, possibilities of the beautifying of school grounds, largely increased enrollment, and in many places the attendance of practically all children of compulsory school age, instead of the deadening disadvantages of a number of inaccessible single-room schools. In 1917 eighty consolidations were in operation in Manitoba, covering a territory of one-tenth of the entire organized school area.

Progress in the improvement of the health and sanitary conditions of the rural schools continues through the—

> organized campaign in which the Provincial Board of Health and the Department of Education are cooperating. In 1917 the board of health decided to employ a staff of expert nurses to operate in the rural districts. In all cases there has been harmonious and effective cooperation between teachers and nurses. * * * In 1917 sixteen rural schools undertook to provide hot lunches of some sort, and the people look upon it favorably and the trustees give assistance in equipment and materials.

ATTENDANCE.

The problem of school attendance is always one that looms large in education in rural sections. Manitoba has had for some years a legal supervisor of school attendance; and by a succession of acts respecting school attendance, culminating in the one of May, 1917, it has sought to improve the attendance on the elementary schools, though with the reluctance of a democratic people to prescribe general laws it has refrained from passing any provincial compulsory school attendance law. The last act provides for the appointment by school boards or municipal councils of a school attendance officer or officers, and sets forth their duties as well as those of school trustees, parents, guardians, teachers, and inspectors under the act, prescribing suitable penalties. The act has social as well as educational import in its purpose of protecting children from neglect and of securing for them the benefit of an education. Attendance officers to the number of nearly 150 were appointed within the year following the passage of the act.

TEACHERS.

A large part of the credit for the vigor and the growth of the schools of the western Provinces is due to the unusual personnel

of the teachers of the public schools. This is especially true of Manitoba. Here, as in the neighboring Provinces, the teachers are better paid than in the East, and they fill a larger place in the life of the people outside the schoolroom. As a consequence, there is every year a powerful draft upon the teaching force of the older Provinces. In the summer of 1918 an unprecedented demand was made upon the teachers of Manitoba by the Provinces still farther to the west, as shown by the publication of columns of advertisements, "Teachers wanted," appearing in the papers for perhaps the first time in the history of the Province. The greatest unrest ever seen in that body of course followed.

HIGH SCHOOLS.

As would be expected in a Province so progressive as Manitoba, the program of studies of the high schools has been under close scrutiny; and the Manitoba Educational Association has devoted much study to its reorganization and improvement. With the outbreak of the war the need was felt for a readjustment of studies. The time required in foreign languages necessary for admission to the university was considered disproportionate, and the high-school committee attempted an arrangement of courses to give a fair proportion of time to each important subject. The university was therefore asked to lower its language requirement from two foreign languages to one. After many conferences, the university council declined to grant the request. The issue is of course the one familiar in many countries under various names but with the same fundamental problem of dispensing with the study of Latin. Of interest, too, in its bearing upon the preparation for the high school, as well as upon the number of pupils sent into it, is the tendency to unite the two highest elementary grades into one for convenience of teaching where teacher shortage is felt. It has been tested in various localities but has not commended itself in actual practice unless, as has been suggested, Grade VIII could be stiffened and the secondary school begun with it.

THE UNIVERSITY.

An interesting experiment was initiated in 1918 by the University of Manitoba, preliminary to its establishment of a department of commercial education. Representatives were sent to the cities and towns of the Province to survey the possibilities offered for students in that branch, to analyze business conditions, local and general, and to examine methods of taxation and systems of licenses imposed by the various towns and municipalities. The report is awaited with great interest, as promising valuable information not only educationally but economically and legally.

The farthest reaching piece of legislation relative to higher education in the Dominion was enacted in 1917 by the assembly of Manitoba on the basis of the bill submitted by the minister of education, remodeling the constitution of the University of Manitoba, providing for a board of governors of nine members vested with full power over the financial affairs of the university and the final decision of all matters of academic policy; for a university council of 27 members, a few more than one-third of the number of the old council, vested with general charge of courses and academic work; and for representation of the denominational colleges of the Province upon the council alone. Upon the appointment by the Government of the chancellor and the installation of the administrative authorities, the reorganized institution began a vigorous career, with the enthusiastic support of all the educational elements of the Province.

SASKATCHEWAN.

The democratic ideas just described in the case of Manitoba are even more pronounced in the Province just to the west, Saskatchewan; but centralization more akin to that of the eastern Provinces has asserted itself in the public-school system of the latter. This centralization, however, has not lessened the deep popular interest in the schools. Perhaps the most convincing proof of this was the educational survey of the Province decreed by order in council and undertaken during the latter half of the year 1917. The public had been favorably prepared for this survey by the activities of the Public Education League, which had launched public meetings and led up to the proclamation of a public holiday by the premier, on which the needs of educational reform were emphasized at rallies held at a number of points. All this time there had been no lapse in public interest in education, as is shown by the fact that, since the organization of provincial government for Saskatchewan in 1905, school districts had been organized at the extraordinary rate of one a day.

With the tremendous increase in the amount of routine work thus devolving upon the department of education, serious discussion arose as to whether the school unit with a board of three trustees was not too small, and whether the organization of boards of seven members, as for the municipalities, would not be better able to handle a much larger territory organized as a municipality. The matter is as yet unsettled, but indications are that an organic change will be brought about by the stirring of public interest.

The progressive nature of the people and of the schools of Saskatchewan was well brought out in the findings of the survey to which reference has been made. The strongly centralized system,

it was agreed, had been of great service in the early primitive days; but the findings bore out the belief that a system more adapted to a largely increased population and especially one giving consideration to local needs was now required. In the survey, as published in 1918, Dr. H. W. Foght, Director, thus summarized what he regarded as the determining factors in the system:

(1) The people of the Province have failed to use the schools as fully as they should have done.

(2) The pevailing system of school organization and administration in rural districts particularly is no longer adequate for modern uses.

(3) Abnormal opportunities in other occupations and other causes have conspired to make it difficult to train and keep in the profession an adequate number of well-prepared teachers.

(4) The courses of study in elementary and secondary schools do not in all respects meet the demands of a democratic people occupied with the conquest of a great agricultural country.

(5) The schools, in their internal organization, are planned less for the normal child than for the exceptional child, and offer slight opportunity for individual aptness and initiative.

(6) The system of examinations in use is a questionable test of the average pupil's scholarship, ability, maturity, and fitness for advancement.

(7) Bodily health and hygienic conditions in schools, so essential to effective study, have received little attention in the daily teaching, and are largely disregarded in the physical equipment of the schools.

(8) The schools, while liberally maintained, must receive even larger support in order that commensurate returns may be obtained on the school investment.

THE SCHOOL ATTENDANCE ACT.

The School Attendance Act, which came into effect May 1, 1917, at once increased the enrollment and regularity of attendance of school children falling within the compulsory age from 7 to 14 years. By its provisions town districts appoint attendance officers who report to the department of education every month. In village and rural districts such duties are fulfilled by the teachers. As regards territories covered by the school act and length of school year, every town and village district, and every rural district with at least 12 children of compulsory age resident within 1½ miles from the schoolhouse, shall offer at least 210 teaching days; and every district with at least 10 children of compulsory age shall offer at least 190 days. A most important phase of the act is that it provides for keeping systematic records of the population of compulsory age, which has hitherto not been legally required.

School consolidation is also involved with provisions for attendance, an amendment to the act just mentioned made in 1917 giving the minister of education power at discretion to allow a larger area than 50 square miles to be included in the district served by consolidated schools. Very significantly, Saskatchewan has fallen far

below its sister Provinces of Manitoba and Alberta in the progress shown in consolidation, though considerations of climate and topography made consolidation as necessary and as feasible as in either of the other two Provinces.

Dr. Foght, in his summary, concludes that:

Consolidation has made little progress in Saskatchewan because no provincial policy has yet been adopted extending Government grants and guidance to proposed consolidation districts. A belief that Saskatchewan is not yet ready for consolidation may have caused Government officials not to push the matter. No concerted policy has yet been adopted by the Government to encourage some particular form of consolidation. The 18 consolidations now in operation are due mainly to local initiative.

SHORT-TERM SCHOOLS.

Another unfavorable phase is the existence of the so-called "short-term school," by which are meant rural schools opening in April or May and continuing from five to eight months. Such an arrangement plainly represents a compromise which, whatever may have been its original justification, has brought seriously grave disadvantages in its train. These schools engage a new teacher each year and often change teachers two or even three times in the year. In many cases they can only obtain "permit" teachers because qualified teachers prefer schools that are in operation throughout the year. On this point the minister of education concludes:

The consequence is that the children in these schools are backward in their studies, with thousands growing up who have never got beyond Grade IV, and unless action is taken at once these conditions will continue with the present generation poorly equipped for life's tasks.

INSTRUCTION IN AGRICULTURE.

As agriculture is the predominant industry of the Province, practically all interest in vocational and technical education for the past two years has centered in the furthering of agricultural education. The agricultural instruction committee in 1917 made the following recommendations to the Department of Education which, while they have not as yet become part of the official regulations, are practically certain to be adopted at an early date:

1. That agriculture and elementary science be compulsory for Third Class Part II of the teachers' course.
2. That household science be an optional subject with music or manual training for Third Class Part II of the teachers' course.
3. That agriculture and general science be compulsory subjects for examination instead of physics and chemistry for the second class teachers' diploma.
4. That an annual maximum grant of $500 be made to such high schools as give adequate instruction in the course in agriculture as defined from time

to time in the regulations of the department, the amount of such grant to be based upon the qualifications of the teachers, the nature of the equipment, and the efficiency of the teaching as reported upon by the inspector of high schools.

Aside from the formal instruction in agriculture, a large part is played by the Rural Education Associations organized in the various districts and municipalities with the cooperation of inspectors and the general public. Such interest has been aroused in this movement that more than 40 local associations were organized during the year 1917. They promote popular interest in education by means of school fairs, at which exhibits along all lines of country life are shown.

TEACHERS.

As in Manitoba, the personnel of the teachers of Saskatchewan is drawn largely from outside the Province, Ontario furnishing in 1916 more than 30 per cent and Manitoba 28 per cent of the total. The number of young teachers is unusual, one-third of the rural teachers being below 21 years and over half ranging from 20 to 25 years. In both of these facts grave disadvantages are evident. The present facilities to train teachers within the Province are entirely inadequate, and many hundred schools must be filled with provisional teachers, while very many others are below 21 years of age but hold permanent certificates. In the high schools, however, while the teachers are comparatively young, the average age being 32, the average of training and experience is unusually high. As Dr. Foght says:

> This combination of youthfulness and experience constitutes a very real asset for education in the Province, especially in view of the movement for better integration of the high schools and the grades, which will demand men and women who know intimately both elementary and secondary education.

In the field of health promotion Saskatchewan has made a forward step in the organization of a division of the Department of Education in charge of a director of school hygiene. A vigorous campaign for the conservation and promotion of health has been initiated and a survey made of hygienic conditions in the rural schools.

ALBERTA.

In Alberta educational progress for the past two years has been steady, in spite of distracting conditions due to the war. Naturally, a falling off was seen in the average attendance of pupils, though an increase was seen in the case of girls. The secondary schools suffered from enlistment of the larger boys for overseas service; and for purposes of increased production large numbers of boys, and in some cases girls, were permitted to assist in farming operations, the school-attendance act being less rigorously enforced.

The changed conditions brought about a different method of classification between graded and ungraded schools. Hitherto ungraded has meant rural, but many rural school districts now conduct graded schools, and as rural schools are more and more consolidated they pass from the list of ungraded to that of graded schools.

A further interesting effect of the change is seen in the fact that the enrollment of pupils in the secondary grades is increasing much more rapidly than the total enrollment in the lower schools of the Province, the increase being from less than 3 per cent in 1906 to nearly 6 per cent in 1916. Noteworthy also in its bearing upon the schools is the evidence of greater prosperity in the rural communities than in the town and village districts; this is shown by the fact that more than two-thirds of the money borrowed by school authorities according to the system of legal debentures was for the rural school districts. The distinctive feature of the financial support of the schools of Alberta is constituted by the legally organized school debenture branch, under a manager appointed by the Premier, a very important part of whose work is to supervise school-building plans, contracts, and initial orders for equipment, to prescribe modern requirements of lighting, heating, and ventilation, and to approve all financial engagements made by local boards. To it is largely due the credit of having made Alberta, the newest of the western Provinces, widely known for the uniform excellence of its school buildings.

THE SCHOOL ATTENDANCE ACT.

Most important of the administrative acts pertaining to the schools was the passage of the amended and much strengthened School Attendance Act in 1916, which took the place of the old "Truancy" act, whose name and some of whose provisions had become distasteful. Attendance officers under this act in the cities and larger towns are responsible for its enforcement. In the rural and village districts enforcement is by means of a school attendance branch and the school inspectors, who are ex officio provincial attendance officers. In cases of unjustifiable nonattendance the new law provides that officials, after exhausting tactful measures with recalcitrant parents or guardians, issue legal warning notices, serving them like other legal papers and allowing 10 days to elapse before the application of the law. Teachers also are required to carry out the provisions of the act especially by the inclusion of information bearing upon nonattendance in their monthly attendance reports.

A serious difficulty was found, however, in the laxity with which local authorities excused attendance on various exceptions outlined

in the act, especially that stating that "the parent, guardian, or other person shall not be liable to any penalty imposed by this act in respect to the child if the child has attained the full age of 14 years and is regularly employed during school hours in some useful occupation." Under this head, owing to the scarcity of farm labor, a great many boys missed the schooling which they should have had. Many inspectors, however, considering the harvesting and marketing of crops important as war measures, did not bring legal pressure to bear, being convinced that such nonattendance was a matter of necessity and not of neglect.

CONSOLIDATION OF SCHOOLS.

Consolidation of rural schools has proceeded steadily in Alberta, contributing also, by the wisdom of a number of inspectors, to the furthering of vocational and rural secondary education. This was initiated by a very progressive prevocational survey made by the Department of Education with a view of reaching primarily the country youth in their teens. To this end recommendations were made for distinctively rural schools in which a high-school course of two or three years, and closely adapted to local needs and conditions, should have the most prominent place.

THE BILINGUAL SITUATION.

The bilingual situation in Alberta has been discussed in connection with that topic, as it applies to the Dominion of Canada. As regards the setting of this problem in the school system and administration of the Province, attention should again be called to the fact that Alberta alone has a special supervisor of schools for foreigners. This officer has been of the utmost advantage and usefulness in instructing trustees, both lay and official, in their duties of putting and keeping the schools of foreigners in operation; in supervising the affairs of the districts; in harmonizing internal dissensions; in securing qualified teachers; in building teachers' houses in many places, and in general lending aid to the boards in remote localities, and in the management of financial affairs. A large part is also played by this official in spreading among the alien population elementary ideas of sanitation and correct methods of living, which connects vitally with the projected system of medical inspection throughout the Province, which is likely to be made compulsory within a short time.

TEACHERS' CODE OF HONOR.

An interesting proof of the progressiveness of the teaching force of Alberta is furnished by the action (1918) of the Alberta Teachers'

Alliance in promulgating the following code of honor for the guidance of the body:

It shall be considered an unprofessional act—

1. To disregard the validity of a formal contract with the school board.

2. To criticize adversely, except in an official capacity, the efficiency of a fellow member of the alliance.

3. To pass along rumors derogatory to a fellow member of the alliance, whether such rumors be based on fact or not.

4. To seek professional advancement by any other than professional means.

5. To seek employment with the school board (*a*) not in good standing with the alliance, (*b*) already having a member of the alliance under contract for the same position.

6. To make known to nonmembers, except through authorized channels, the proceedings of a committee or general meeting of the alliance.

BRITISH COLUMBIA.

Educational interest in British Columbia has centered during the past two years in the extension of the work of the high schools in such a way that the varied needs of different communities may be served; in so developing the work of the rural high schools as to adjust them to the life of agricultural communities, and especially to attract the farm boy into the high schools and there train him definitely in agricultural science; in providing nonprofessional training for teachers in elementary as well as high schools; in spreading the appreciation of the need of physical exercises and organized playground sports; in effecting important changes in the high-school examinations whereby in cities of the first and second class examinations were waived and pupils were promoted to high schools on the recommendation of their principal, and second-year high-school pupils were promoted on that of their teachers.

On the strictly administrative side, amendments were made to the public schools act of 1916 for the transition of assisted schools to the status of regularly organized school districts, for defining city school districts of various classes, for apportioning per capita grants of various amounts for cities of the various classes and for rural school districts, and for paying bonuses upon the salaries of teachers in the rural districts. Perhaps most noteworthy is the provision by which—

where it appears that in any school district there are 20 or more persons of the age of 14 years and upwards desirous of obtaining instruction in technical education, manual training, domestic science, commercial training, or in the ordinary branches of an English education, the board of school trustees may establish, under regulations issued by the council of public instruction, night schools for their benefit.

PUBLIC SCHOOL SYSTEM OF JAMAICA.

By Charles E. Asbury,

American Consul, Port Antonio, Jamaica.

ORGANIZATION.

Jamaica is an island in the West Indies, and a British colony, with a population by the last census of 831,000, of whom over 95 per cent are of African descent, either in whole or in part. Fifty-three per cent of the population can read and write. In 1916–17 the average attendance at school was 62,000, or 1 of 12 population. With a total expenditure by the Government of $6.000,000, only $420,000, or 7 per cent, was spent for public education. This amounts to $6.75 per head of average attendance and 55 cents per capita of population.

The facilities for public instruction in Jamaica consist of public elementary schools in the towns and villages throughout the island, with a few private secondary schools in the chief centers. There are training schools for teachers which give advanced elementary instruction, but there is no college in the colony.

The schools are administered under a board of education for the colony, at the head of which is the director of education. The director has on his staff 11 inspectors, who are usually men from English universities. The Department of Education allots the funds appropriated for educational purposes, and exercises advisory supervision over all the schools of the island. The governor in privy council retains final authority in all matters of educational legislation.

A large majority of the public elementary schools are owned and managed by the various Protestant churches, and receive financial aid from the Government. At the last report there were 696 public elementary schools, of which the churches owned 566, the Government 111, and other organizations 19. The Department of Education maintains its control over the schools through its power of granting or withholding financial support.

Each parish has its school board, and the schools in certain portions of the island have been grouped under district boards. These boards, however, have only such powers and duties as the department may delegate to them, the immediate control of each school resting in the hands of a manager, who represents the owners. The manager is advised by a local board, but he has authority to make final decisions, employ teachers, provide equipment, and inspect the schools, and in most ways, he actually directs the policy of the school.

GRANTS, SUBSIDIES, ETC.

The appropriations for education are distributed among the schools by the department through an elaborate system of "grants," paid to the school managers in monthly installments. An average attendance of 30 or more is necessary to secure a grant. The amount of the grant is determined by the average attendance and the "marks" or rating given the school at a formal annual inspection. A perfect rating consists of 84 marks. If the average attendance is 60 or more, a grant is made of $4.86 for each mark. If less than 60, $3.65 is granted for each mark, and 2 cents in addition for each unit of average attendance. If the average is over 50 but under 70, an additional $1.45 is paid for each unit of attendance above 50. If the average is over 70, $2.90 is paid for each surplus unit of attendance, in addition to the $1.45 for the units from 50 to 70. All these grants are to be applied to the salaries of the teachers. Additional small grants are made for teaching industrial subjects.

The department makes limited grants to assist in erecting or repairing school buildings and teachers' cottages. In no case can this grant exceed $486 for a school, or $243 for a cottage, or one-half the total cost of the project. The average annual grant for buildings is approximately $2,500. The building must be located on at least one-fourth acre, and must be occupied as a public school or teachers' dwelling for at least 12 years after the grant is made. All school sites and building plans must have the department's approval. Where a Government school is located in a building owned entirely by private persons, a nominal yearly rental of 36 cents is granted for each unit of average attendance. There are also small grants for supplies, library books, sewing materials, sanitation, garden fences, etc. These amount to only a few cents per unit of average attendance.

TEACHERS.

All teachers in the public schools are registered by the department, and are classified on the basis of training and rank in examination. They must be 18 years of age or over, and must have had at least one year in a teachers' training school or have passed the third year pupil-teacher's examination. Teachers are classified as "principal teachers" if they are judged qualified to take charge of a school; as "assistant teachers" if not so qualified. The advancement of teachers depends upon their success in school and in examination, and the length of their experience. Certificates are issued upon a successful examination in the second or third year's course at a training school. A principal teacher who has taught for 12 years, with inspection grade of "first class" for at least six years, is given a

"good service" certificate which has an important bearing upon the teacher's salary. A few teachers are registered as qualified for kindergarten work. They are required to have special training, and aspiring teachers are afforded an opportunity to secure this training, partly at Government expense.

Each school may employ, in addition to the regular teachers described above, one or more pupil teachers. They must be between the ages of 14 and 17, and are required to pass an examination. They must execute a three years' contract, and are paid a small wage. Pupil teachers are entitled to receive three hours' extra instruction per week from the principal teacher, outside of school hours. Upon passing an examination after three years' service as a pupil teacher, the candidate is entitled to registration as an assistant teacher, and is eligible for employment. A few pupils who have completed the elementary course and are unable to continue their education in a private secondary school are allowed to attend the elementary schools and act as monitors, with the privilege of attending the pupil-teachers' classes.

The training schools for teachers continue the essentially English idea of education—a matter of private initiative and Government subsidy. Any school with proper equipment which follows an approved course of study may seek recognition as a training school for teachers. Some of the requirements are the pupil-teachers's examination for entrance, his being of the minimum age of 17 years, and pursuing a three years' course, and the maintenance of an elementary practice school, which in turn may be a "Government grant" school. To each recognized training school the Government makes a grant of $120 per year for the board and instruction of each regularly admitted student, with a bonus of $50 for each one that passes the annual examination, provided that the total grant does not exceed four-fifths of the total cost of maintaining the school. Religious interest or philanthropy is expected to supply the remainder.

Before students are admitted to the training schools, they must make an agreement, supported by a bond, to teach for six years in the Jamaica schools. For each year of failure to fulfill this promise, the student becomes liable to the Government for the sixth part of the cost of his training.

The training school scheme has not been found a great success. The Government has been compelled to establish two training schools of its own, in addition to the subsidized ones, in order to keep up the supply of teachers. There are at present about 500 certified teachers in the colony, with 114 students in the training schools run by the Government, and 26 in the schools under subsidy.

In the training schools, as in all other Jamaican schools, the course of study is determined by the subjects on the final examination.

These examinations are given at the close of each year's work, and include the following subjects: Reading and recitation, writing, English, arithmetic, algebra, school management, scripture and morals, geography, history, science—general and agricultural, physiology and hygiene, geometry, vocal music, drawing, and manual training for men, or domestic science for women. A grade of 50 per cent is required for passing in the first six subjects, and 33 per cent in the others. In addition to the regular training course, a brief agricultural, technical, or kindergarten course may be given and the attendance of teachers permitted or required, with a portion of their expenses borne by the Government.

The salaries of teachers are at present determined by the system of grants and marks mentioned above, based upon the rating of their school at the annual inspection. A radical change in the system was made recently, to go into effect April 1, 1919. Hereafter the determining factor is to be the average attendance of the school, with the teacher's rank and success record taken into consideration. The present minimum of $90 per year for assistant teachers will be retained, but salaries will average about $200 per annum, with a maximum of $875 for the head masters of the larger schools. All extra grants and bonuses will be discontinued. This change has been suspended, however, owing to lack of funds to put it into operation.

Teachers are employed by the manager of the school under written contract, subject to the approval of the department. The contract may be terminated at any time by either party after three months' notice, and every vacancy must be advertised.

SUPERVISION AND ADMINISTRATION.

All superintending is in the hands of the 11 inspectors attached to the Department of Education. They receive salaries of from $730 to $1,215 per annum, with traveling expenses. Provision has recently been made for raising the pay of inspectors to $972 and $1,458, and creating two new positions of "chief inspector," with salaries of from $1,458 to $1,700. The intention is to appoint only graduates of English universities to these positions.

Every school in Jamaica which receives Government grants and offers an elementary course of instruction is a public elementary school. All pupils may attend who care to do so, provided they are eligible under the law and accommodations are adequate. No tuition may be charged. New schools are established upon application to the board of education, which in turn submits the proposition to every minister of religion within a radius of 4 miles from the

proposed location. If the department decides that the school is necessary, and that all requirements have been met, it may grant a lump sum for the first year and permit the school to be opened.

Schools must be in session four days per week, mornings and afternoons, and in certain towns one-half day in addition. Each day's session lasts five hours. A minimum of 28 half-day sessions per month and 288 per annum is required. Holiday periods must be approved by the department, and usually differ widely in the several schools.

The board of education has authority to make attendance at school compulsory, but so far the law has been made effective only in three towns of the island. The president of the Jamaica Teachers' Union states that there are from eighty to ninety thousand children in the island who do not attend school. The question of extending the compulsory attendance law over the entire island is being constantly agitated, but it is improbable that any change will be made under the present economic conditions. Objection is also made to the provision of law which compels a pupil to withdraw from school at 14. Unless he has completed the elementary course by that time, he is deprived of any further opportunity to do so.

The teacher is required to keep an elaborate set of records, including admission book, register of attendance, log book, stock book of materials, account book, pupil-teachers' record book, and garden book. The log book is very interesting. It is a sort of diary of the school, in which is recorded day by day every event of importance. It also contains the record and recommendations of the annual inspections. Before a teacher may administer corporal punishment, he must be authorized to do so by the manager, and the authority must be written out in the log book.

CURRICULUM AND COURSES.

The curriculum of the public elementary school is based entirely upon the subjects for examination at the annual inspection, and the entire time and attendance of teacher and scholars are devoted to preparation for that event. The inspection lasts only one day, and in that time the inspector examines all the pupils on the whole curriculum and determines the rank of the school and the standing of the teacher. The highest rank attainable is "84 marks," distributed as follows: Organization, 6; discipline, 6; reading and recitation, 15; writing and English composition, 15; arithmetic, mental and written, 15; elementary science, especially agricultural, 8; Scripture and morals, 5; drawing and manual occupations, 6; geography with incidental history, 4; singing and drill, 4; total, 84. A school which attains 56 marks or more, with a grade of not less than two-thirds of

the possible marks in the fundamental subjects and one-third in the others, is ranked as of the first class. Others rank second or third class according to their marks.

The elementary course is graded into seven standards, each supposed to represent one year's work of a normal child. The lowest standard is called the "junior," and the others are numbered consecutively from I to VI. The work of the sixth standard is not essential for entrance to a secondary school, and is given only in the larger schools corresponding to our "graded" schools. In the smaller schools the standards are grouped into three divisions, lower, middle, and upper, with arrangements for covering all the course by a system of two courses of study to be given in alternate years.

It would appear from the list of studies that the curriculum is much the same as that of the average American school. The instruction, however, is radically different. There is much more emphasis in the Jamaica school upon the purely mechanical exercises, such as reciting memorized poems, writing from dictation, drawing and penmanship. There is an almost total absence of quiet seat work and study. The first impression of a Jamaica school room is likely to be one of hopeless confusion. Each of the three divisions may be reciting at the same time, to the teacher, the assistant, and a pupil-teacher. It is remarkable what good results are obtained, however, in some schools.

Some difficulty has been experienced in the matter of religious instruction. Since the various churches own so many of the schools, they have insisted upon Bible teaching and the catechism in the curriculum. In order to meet the situation, the study of Scripture and morals is included, but teachers are enjoined from commenting except in the way of pointing out an obvious and universally recognized lesson. In addition, a conscience clause has been enacted by which pupils who so desire are excused from school during the Scripture hour, which must be at the beginning or close of a session.

INDUSTRIAL AND TECHNICAL TRAINING.

Some real progress has been made in industrial instruction, but the work is greatly handicapped for lack of funds and of competent instructors. A Government technical school was established in Kingston in 1896. Here pupils from the Kingston elementary schools receive instruction in manual training and household industries. The school also conducts continuation evening classes for both sexes. The work is purely elementary, and its limited scope is indicated by the fact that the head master is also the manual training instructor of the principal teachers' college and organization inspector of manual training for the whole island, having direct

supervision over all the manual training work. There are six additional teachers for day classes and six for the continuation school. Provision is made for regular work in manual training, gardening, and "housewifery" in other schools where suitable teachers and equipment can be obtained. The manual training course is for the boys of the upper division and consists entirely of mechanical drawing and simple woodwork. Small grants are made by the Government for teachers and tools.

There are about 400 school gardens in the island, but the instruction in agriculture is very rudimentary. The department requires a plat of not less than one-tenth acre, and assists in the construction of a fence and the purchase of tools. A small grant is also made to the teacher for garden instruction. All the pupils work in the garden, the boys by requirement and the girls by permission. The aim seems to be to use the plat chiefly for experimental purposes and for demonstration, rather than for practical crop results.

All schools are required to teach plain sewing to the girls, and a few which have met the requirements as to equipment receive Government aid for the teaching of cooking and laundering. There are a very few schools where practical domestic science is taught, but they are chiefly private secondary institutions. There is even in Jamaica a touch of the feeling that work is degrading and unbecoming a scholar, and industrial work has been hampered accordingly

Nothing has been done in Jamaica in the way of supervised playgrounds. There is a little drill work occasionally, but the children play their own games in a half-hearted way. The effect is plainly seen in the poor physique of the children, and the absence of the wholesome democratic spirit which free, healthy play so much encourages.

SECONDARY INSTRUCTION.

Secondary instruction has been left largely to private initiative and facilities are consequently limited. The Department of Education exercises some jurisdiction over the private secondary schools, however, and is gradually extending its control. Scholarships are provided from public funds to the total amount of $1,360 annually for deserving pupils who desire to continue their education above the elementary course. These scholarships pay the holders from $50 to $120 annually for two years. They are distributed by competitive examination to applicants who must be under 12 years of age. Holders are expected to pass the Cambridge secondary examinations in order to retain their places. These examinations were introduced in the colony in 1882 by the Jamaica Institute, a semipublic institution. In 1916 there were 471 candidates for the several

grades of the examinations, of whom 60 per cent were successful. The scope of these examinations largely determines the curriculum of the secondary schools. They cover Latin, French, algebra and geometry, English history, geography, English composition, grammar and literature, and Scripture. The scope of each examination is announced in advance, and the year's work is arranged especially to meet the examination requirements.

The only secondary technical instruction offered by the Government is in the form of trade scholarships to winners of a competitive examination who agree to apprentice themselves to a master workman in their chosen trade for a period of years. During the first two years of the apprenticeship, the students are given instruction in the Kingston Technical School at the expense of the Government. A grant is made to cover the cost of their board and clothes during the apprenticeship, and to provide them with kits of tools when they complete it. The maximum number of students provided for at any one time is 25.

Legislative provision has been made for grants to continuation schools for working boys and girls between the ages of 14 and 17, but so far Kingston is the only community to take advantage of it, The law provides for a course of 26 weeks of 3½ hours per week, with instruction in English, arithmetic, Scripture, and home economics, manual training, or agriculture. A movement is on foot to obtain more substantial Government aid for these schools so that the crying need for elementary instruction for the boys and girls above 14 may be met.

There is a healthful dissatisfaction with the present system among the progressive element, which promises to become strong enough ultimately to secure good schools, adequately equipped, with strong emphasis on industrial and vocational education.

RECENT PROGRESS OF EDUCATION IN AUSTRALIA AND NEW ZEALAND.

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GENERAL FEATURES.

The Commonwealth of Australia comprises the States of New South Wales, Victoria, Queensland, South Australia, Western Australia, and Tasmania. Each State has developed its own system of education, controlled and supported by the State authorities. Primary education is free in all the States and secondary education is

free in some. Compulsory school attendance in most of the States is from 6 to 14; in New South Wales the compulsory period begins at 7.

Every effort is made by the State authorities to reach the children in the sparsely settled centers. For this purpose the State establishes central schools in such localities where the children can be conveniently conveyed to school free of charge, or provisional schools, i. e., small schools in which the attendance does not exceed 8 or 10. When the number of school children does not warrant the establishment of a provisional school, half-time schools are formed, the teacher visiting these schools on alternate days. In some places the teacher goes from house to house. In 1908 New South Wales inaugurated a "traveling" school, the teacher being provided with a tent for himself and one to be used as a school. Two additional schools of the same kind have since been established. Other States have made similar arrangements. Often the State grants subsidies to a teacher engaged by two or more families; the teacher must, however, be officially recognized by the Department of Education. In localities where no facilities can be found for either schoolroom accommodation or board and lodging for a teacher, the children are reached by correspondence. This scheme seems to bring best results in homes where the parents or elder sisters or brothers can assist the young beginner. It has been successfully introduced in New South Wales, Victoria, and Tasmania. In Victoria the system was developed from the Teachers' College, and 120 isolated children were thus taught in June, 1917.

Education in the Commonwealth is on the whole homogeneous. As each State developed independently, minor differences arose in the course of years. To make the work of the various departments more uniform and for the purpose of coordinating the school systems in the different States, the first conference of Australian directors of education was held in Adelaide in July, 1916.

According to the ministerial report the following resolutions were passed:

1. AGRICULTURAL EDUCATION.

(*a*) That nature-study work be developed with a view to increasing its usefulness and making it of practical benefit to the children.

(*b*) That agricultural education be developed and carefully organized.

(*c*) That suitable schools be established in rural centers, so as to give, in addition to higher primary work, a direct practical training in subjects specially useful to rural workers; e. g., for boys—woodwork, metal work, blacksmithing, simple building construction, land measurement, and agriculture; for girls—cookery, laundry, dairying, and smaller farming industries.

(*d*) That for the largest centers of population agricultural schools be established for city boys who have completed the primary course and who desire to follow agricultural pursuits; such schools to act as feeders to the agricultural colleges.

(*e*) That it is desirable that some method be adopted to coordinate the work of the various State authorities, dealing with various phases of agricultural education.

2. CONTINUATION PERIOD OF EDUCATION.

1. That as far as practicable provision should be made for the continuous education of boys and girls beyond the primary standard of instruction, and that this education should include both a specific training for citizenship and courses of instruction preparatory for various classes of future occupations.

2. That legislation is desirable to provide for such continued education, both full time and part time, in daylight hours; and, further, to provide that it be obligatory upon all boys up to the age of 16 to receive such continued education, either whole time or part time, where facilities for the purpose are provided.

3. That while facilities for similar continued education should be made available for girls, their attendance for the present should rest on a voluntary basis.

3. INDUSTRIAL EDUCATION.

1. That instruction in craftsmanship be in two grades:

(*a*) Preparatory.—To be given in full-time day schools in continuation of the primary-school course, and that the courses of such schools include such instruction combined with hand training as will provide a preparation for more specialized trade training.

(*b*) Technical schools for instruction of persons (i) Actually engaged in a skilled trade, in order to supplement by school instruction the training gained in the practice of the trade; (ii) But it is desirable that instruction in such schools be arranged in daylight hours.

2. That the State and Commonwealth Governments be invited to give a lead to other employers by requiring the attendance of their young employees, during working hours, at suitable technical classes.

4. COMMERCIAL EDUCATION.

1. That in view of conditions likely to prevail after the war, attention be given to the provision of commercial education.

2. That provision be made in the courses of study of secondary schools of both lower and higher type for a commercial group of subjects in those States in which this provision has not already been made.

3. That for those who have left school and have entered upon commercial callings, suitable evening courses in the State educational establishments be instituted, and arrangements be made by which these courses shall lead up to the university school of commerce.

4. That arrangements be made whereby one or two universities should provide the instruction on some reciprocal plan to be determined upon by consultation among all universities of the Commonwealth.

Of interest are the resolutions with regard to arrangements for education in adjoining States of children living in border States. These read:

(*a*) That children living on the borders of a State be given every facility for attending school in the neighboring State if there is no school near them in their own State.

(*b*) That the department, when dealing with questions of establishment of new schools on the borders of States, take into consideration the total number of children in the district on each side of the border.

(*c*) That there is no need for any financial adjustment in respect to this arrangement, as the benefits to the States are fairly equally divided.

(*d*) That a review of the border schools be made as soon as practicable, with a view to improving existing conditions.

The conference also passed a resolution that the school certificate of one State be recognized by another State, and finally that "there be cooperation between the States in the matter of training of specialist teachers."

WORKERS' TUTORIAL CLASSES.

An interesting development in the education of the working circles is the inauguration of the Workers' Tutorial Classes, an organization somewhat akin to the extension lectures. The scheme was launched in 1913 in connection with the formation of the Workers' Educational Association.

The Workers' Tutorial Classes exist at present in all the States. Although controlled by the university, they receive Government grants (except in Western Australia) ranging from $1,500 in Victoria to $25,000 in New South Wales. The aim of these classes is to bring the university into closer relation with the working men. The principal subjects offered are industrial history, economics, political science, and sociology. The entire course extends over three years. The students' reading is supplemented by class discussions, and by writing an essay on subjects dealing with some phase of economics, civics, and sociology.

Tutorial classes have been formed at the universities as well as in suburban and country centers.

GERMAN SCHOOLS IN AUSTRALIA.

A number of private schools were conducted by German teachers in several States of the Commonwealth prior to the war. In South Australia 52 schools were under the control of the Lutheran Church, and the language of instruction was exclusively German. The education act of 1915 provided that teaching in these schools should be through the medium of English for at least four hours a day. The education amendment act of 1916 modified this law to the effect that the Government should take over all the Lutheran schools and that no language but English should be spoken in the schools. The use of German as the language of instruction is prohibited in all the States of the Commonwealth.

TRAINING OF RETURNED SOLDIERS.

The Department of Repatriation has been created in the Commonwealth for the purpose of replacing the returned soldiers in civil life. An officer of the department meets the transports at the port

of disembarkation and places before the men the facilities provided by the State. It has been proposed to provide workshops in leather work, basket-making, raffia work, and toy making for the convalescent men who are still in hospital. The proposed workshops are to be under the control of the military authorities.

The Department of Education in each State offers free tuition to returned men in all the technical colleges; responsibility of finding employment for those who had finished their training rests with the Government.

THE TRAINING OF TEACHERS.

The training of teachers received considerable attention on the part of educational authorities. With the institution by the States of a wider high-school system and greater facilities for the study of the subjects relating to education at the universities a marked improvement was effected in the training of teachers. In recent years definite progress in that direction was made in the States of Victoria and Tasmania.

In Tasmania the new scheme of teachers' training, put into operation in January, 1918, lengthens the minimum period of training from 15 weeks to 6 months and adds new requirements for the junior public examination. The new scheme provides four distinct courses according to the nature of the work which the applicant is to undertake.

(*a*) A short course which aims to prepare teachers for provisional schools and the less important positions in the primary schools. It extends over six months.

(*b*) Infant course designed for prospective teachers in infant and kindergarten schools. The course extends over one year.

(*c*) Primary course designed to train teachers for the primary schools. The students must have completed two years of professional training in a State high school and have qualified for matriculation before entering the training college. The course extends over one year.

(*d*) Secondary course designed to train teachers for the secondary schools. It is open to promising students who have satisfactorily completed the primary course. The length of study is one to two years, in addition to the year spent in the primary course.

Before appointment the prospective teachers enter into agreement with the school authorities to serve the department for a certain length of time, which varies from two to five years, according to the expense and length of the course they have pursued.

A similar scheme for the training of teachers was put into operation somewhat earlier in Victoria. Instead of one course, leading to the trained teachers' certificate, four courses have been provided, namely, a secondary, a primary, an infant, and a short course for

teachers of small rural schools. Under a correspondence system rural teachers may receive further instruction by corresponding with the Melbourne High School. Similar arrangements are also made at the Teachers' College for country teachers who are studying for an infant teacher's certificate.

The training of teachers has been further greatly promoted by the courses on education recently introduced in some of the Australian universities; for instance, a lectureship on education has been inaugurated at the university of Tasmania. At the university of Western Australia education may be offered as a subject for a degree in arts; arrangements have also been made for a postgraduate diploma of education.

TECHNICAL EDUCATION.

The spread of technical education continues in all the States of the Commonwealth. In recent years noteworthy measures for the purpose of reorganizing the technical schools have been taken in New South Wales, South Australia, and Tasmania.

In *New South Wales* a scheme was evolved whereby the system of the workshop was coordinated with that of the technical school and college. Two main courses of instruction have been established: (*a*) Trade courses for apprentices and (*b*) higher courses for students desiring to pursue their studies in the various trades and professions. An important feature in the new scheme is the regulation regarding admission. No student is admitted to any course unless evidence is furnished that he possesses sufficient preparatory knowledge to benefit by the training. An exception is made in the higher diploma course in science, which is open to students irrespective of occupation. The trades courses are divided into two parts; the lower courses, covering a period of three years in the trades schools, and the higher, extending over two years in the technical colleges. A trade school leaving certificate admits the student without further examination to a technical college and thence to the university. The primary technical school is thus linked with the highest institution of learning.

In 1916 there were three technical colleges in the main industrial centers, and 10 trades schools in suburban and country districts; classes in elementary technical instruction were held in various smaller localities.

The measures regarding apprenticeship inaugurated in New South Wales in 1914 were introduced a few years later in *South Australia.* The technical education of apprentices act, passed by the legislature in 1917, provides for the appointment of an apprentices advisory board, with the view of changing the whole system of apprenticeship. The chief provision of the act requires that

each indentured apprentice, during the first three years of his apprenticeship, may be compelled to attend suitable technical classes for six hours per week for 40 weeks per year. Four of these hours shall be during the working hours and two in the evening.

In *Tasmania* a commission was appointed in 1916 for the purpose of developing technical education, and bringing the existing technical schools into proper relation with the primary and secondary schools.

As a result of the commission's recommendations a technical branch in charge of the organizing inspector was created in the Department of Education. Technical schools were reorganized and classified according to their courses as junior or senior technical schools.

The junior technical schools aim to give prevocational training in industrial, commercial, and domestic subjects. The course extends over either two or three years and is free. The senior technical schools provide vocational training in industrial, commercial, art, and home-making subjects. The length of the courses varies from two to five years. Plans have been made for the opening of four junior technical schools in the immediate future.

Progress in technical education has also been made in Victoria, where seven junior technical schools were opened recently. In Queensland the first trade preparatory classes were inaugurated in 1917 and progress was so gratifying that the scheme will undoubtedly lead to the establishment of a comprehensive system of apprenticeship.

An interesting feature of the technical education is the setting up of advisory committees consisting of representatives nominated by employers' and employees' associations. These committees are formed for each subject or group of subjects offered in the technical schools. The duty of the advisory committees is to visit classes and inspect the work of the students. They may also advise on the scope and detail of the syllabus.

The following special features developed in recent years in the various States are of interest:

NEW SOUTH WALES.

Public instruction (amendment) act, 1916.—This act contains important provisions regarding compulsory school attendance, the certification of private schools, and the inspection of school premises. Compulsory school attendance is provided for children between the ages of 7 and 14, the lower age limit being raised from 6 to 7. Exemption is granted to children receiving instruction at home on at least 85 days in each half year. To comply with the new regu-

lations children must be sent to schools certified by the department as efficient. Hitherto the department exercised no supervision over private schools except those that applied for registration under the bursary endowment act. This act, passed by the Parliament in 1912, provides bursaries for students in public or private secondary schools and in the University of Sydney. Private schools desiring the benefit under the act must register and comply with the department regulations with regard to premises, the organization and equipment of the school, the method and range of instruction, and efficiency of the teaching staff. Fees in the primary schools were abolished in 1906, in high schools in 1911. Since 1916 textbooks and materials have been provided free. In recent years great progress has been made in secondary education. The number of high schools has increased from 5 in 1910 to 22 (including 3 intermediate) in 1916; the average quarterly enrollment has risen from 894 to 5,330, and the cost per scholar from about $35 to $105.

Higher education is fostered by a system of public exhibitions which include the cost of matriculation, tuition, and degree fees. To cover the increased cost of the exhibitions the statutory endowment fund was increased by £10,000 per annum under the provisions of the amending act of 1916. By the same act £2,000 were assigned for the establishment of a chair of architecture at the University of Sydney.

The Government aid received by the University of Sydney during the year 1916 amounted to £54,592. The teaching staff consisted of 23 professors, 7 assistant professors, and 122 lecturers and demonstrators. There were also on the university staff 8 honorary lecturers and demonstrators. The number of students attending lectures during 1916 was 1,660, including 500 women.

VICTORIA.

Education of women.—The Council of Public Education, appointed to advise on educational matters, submitted in its report for 1917–18 the following data on education of women. The council pointed out that in view of the fact that compulsory education ends at 14, and girls are not permitted to work in a factory until the age of 15, much valuable time is wasted. The council proposes, therefore, to extend compulsory education of girls until the age of 15. It suggests that during the impressionable years of the girl's life she should be taught in special schools by women teachers. The curriculum in these schools should embrace cultural as well as practical subjects. The subjects proposed by the committee include English, mathematics, geography, history and civics, hygiene, and music, also instruction in simple cookery, needlework, and laundry work. Practical work should not occupy more than one-third of the time during the first

year, but should be extended to one-half of the time during the final year.

As regards secondary education the council found that "at present the course of work followed is very largely determined by prescribed entrance examinations to the university." This should be changed. Instead of a prescribed course of study, alternative courses should be instituted for girls who do not contemplate a university course. Courses in art and music should be introduced in the school curriculum and given the same credit as those in literature and mathematics.

The general practice in the secondary school—with boys as well as girls—is to look upon art as something like an excrescence; it is dubbed an "extra," and is not considered worthy of a recognized place in the curriculum. This should be corrected.

The girl who leaves the primary school, and, more particularly, the older girl who leaves the secondary school, should do so with, at least, the beginnings of a cultivated taste. Mere literacy studies, however important, will not do this. The critical artistic faculty need cultivation as well, and as much as any other. Study should not stop short at the ability to express form and color, but should, by the application of form and color to decoration and design, and its expression in dress, architecture, and furniture, cultivate an appreciation of tasteful and appropriate surroundings—matters that are far too important to be left to the tender mercies of the dressmaker or the furniture warehouseman. Liking and disliking should have a basis in knowledge and culture, and not in ignorant whim and caprice.

Industrial training for women should be greatly extended. Junior technical schools for girls desiring to enter the industrial field should be preparatory to the courses in technical schools which in Victoria are open to women. Greater facilities should also be afforded to girls who wish to enter upon a commercial career.

Finally, the council lays stress on the moral and physical education which should be cultivated in girls' schools on a larger scale.

QUEENSLAND.

Vocational education came under the control of the Government in 1908 and has since been steadily growing. Among the most recent developments are the opening of a trade school for apprentices and the extension of instruction in domestic science and agriculture. In 1917 a scheme was launched to provide classes in domestic science in the sparsely populated centers. This is done by means of itinerant teachers. The traveling instructors are provided with portable structures which are used when erected as domestic science classes. The course is outlined for the period of six months.

A report on agricultural education in Queensland was issued in 1917 by a special investigating committee appointed by the undersecretary of public instruction. The committee advocated the introduction of agricultural education along the following lines:

Agriculture should be a matter for the State rather than the individual. In primary schools gardening and tree planting on a small scale should be encouraged, also nature study and observation. More rural schools with an elementary program on agriculture should be opened by the Government. In secondary schools provision should be made for the study of agricultural subjects. These schools should lead directly to agricultural colleges, which in turn should be affiliated with the university. A department of agriculture under the faculty of science was also recommended.

The first rural school was opened in Queensland in January, 1917. The curriculum is practical. It is designed to equip the boys and girls with knowledge suited to the requirements of those who live on the land.

Agricultural instruction has also been introduced by the department in the primary schools, where milk and cream testing is a part of the curriculum.

WESTERN AUSTRALIA.

In Western Australia every effort is made to reach the children in the sparsely populated areas. Until recently a full time Government school was established in any locality where a regular attendance of not less than 10 children between the ages of 6 and 14 was assured. If the attendance fell below, the school was closed. The parents were then urged to engage a private instructor, the Department of Education sharing the expenses. The new regulation, issued in 1916, increases the school facilities by providing that the average attendance for a period of six months must fall below eight before the school can be closed. The report of the Education Department for 1917 shows that 646 primary schools were in operation during that year. Of these, 35 new schools were opened in 1917, 11, which had previously been closed, were reopened, and 7 were closed during the year. Of the 646 schools, 341 had an average attendance below 20.

The practice of the department can be readily understood when it is borne in mind that the population of the State consists of 320,000 inhabitants scattered over an area of about 1,000,000 square miles. The problem of the small country schools in Western Australia is very pressing.

Endeavors are being made by the school authorities to bring the country child in closer touch with his surrounding. Courses in elementary science have been recently introduced in these schools, and experiments in the growing of vegetables, culture of flowers, and the elementary agriculture carried on in the school gardens. The teachers receive much assistance by way of departmental publica-

tions and outlines in lessons dealing with the elements of agricultural science. In this work the Department of Education is greatly assisted by the agricultural department of the university and by the commissioner of agriculture. The training college is also devoting special attention to the work of prospective teachers in small country districts.

From time to time short courses for teachers extending over a fortnight are held in centers where the neighboring teachers can easily attend these lectures. The courses are conducted by school inspectors.

District high schools have been recently established in several localities. In addition to the general subjects, the curriculum provides for a science course with direct bearing upon agriculture. The high schools are not free, but a system of scholarships enables promising country children to avail themselves of a secondary education.

SOUTH AUSTRALIA.

School committees.—A new departure in the school system in this State is the inauguration of school committees. These committees, represented by the parents of the pupils, take a personal interest in the school of their district. Extensive improvements have been thus introduced. Although the school committees have no voice in school administration, they render valuable assistance in other matters pertaining to school. Classrooms have been decorated with proper pictures, libraries stocked with suitable books, school premises kept in proper shape, and trees planted on school grounds; not infrequently parents and teachers come together and a meeting is arranged for the purpose of discussing the various needs of their school. Commenting on the work of the committees, the director of education says:

> The substitution of school committees in place of boards of advice marks a distinct educational advance. A committee, having only its own school to care for, acquires a sense of ownership, with corresponding interest.
>
> In many places money has been raised and expended on improvements. Quite a number of schools have been supplied with pianos in this way. Altogether, thousands of pounds have been saved to the State by good citizens who have determined that *their* school, at any rate, shall not be in need of the help that *they* can give.
>
> Valuable as this is, I regard as of even greater importance the development of public spirit and personal interest—*our* school, no longer *the* school.
>
> By and by, perhaps, we shall have this interest so extended that no parent will pass the school without looking in and looking on for a few minutes. The parent has as much interest in the school as has the scholar, since upon it depends much of the future of the child. He should know what is being taught, and how.

NEW ZEALAND.

INTRODUCTION.

The war had seemingly little effect on the progress of education in New Zealand. Although 650 primary-school teachers were in active service at the beginning of 1917, and there were hardly any physically fit men teachers left in the entire school system, the minister of education says in his report for 1916 that "not only have the various administrative, educational, and social agencies of the department been kept up to the regular standard of efficiency, but a substantial amount of progress has been made, which even in normal times would justly be regarded with satisfaction."

Among the notable changes the report mentions the following: The raising of the standard of requirements for the certificate of proficiency; the granting of free places in technical schools for holders of certificates of competency (the latter certificates were issued to pupils who were unable to obtain the higher certificate of proficiency, but who showed special aptitude in manual subjects); the inauguration of a grading scheme for the classification of teachers; the extension of medical inspection; and a more liberal allowance for kindergarten schools.

According to the latest report of the minister of education the number of public schools in 1917 was 2,368, with an average attendance of 168,711, as against 2,355 in 1916, with an average attendance of 163,156.

The total expenditure of the Department of Education for the year 1917–18 was £1,809,187, an increase of £119,480 over the expenditure for the previous year. Of the total expenditure, 75 per cent was on primary education, 12 per cent on secondary education (including technical high schools), 4 per cent on university education, 3 per cent on industrial and special schools, 4 per cent on technical education, and 2 per cent on teachers' superannuation and miscellaneous charges.

RETARDATION OF PUPILS.

The question of retardation of pupils received a great deal of attention. Statistics show that the average percentage of retardation in standards 1 to 6, inclusive, is 19; the highest percentage is 24 in standard 3. The causes of this retardation are delayed school entrance, mental or physical defects of pupils, and transfer of pupils from one school to another. For the purpose of reducing this wastage of time, special classes for the care of backward children are to be established in all large schools. It is hoped that a number of children receiving special training for a longer or shorter period will make greater progress and ultimately join the classes with normal classification.

Of all pupils entering standard 1, only 59 per cent finish the primary course, and 41 per cent never reach standard 6. To enable the latter to receive some kind of industrial education a more elastic scheme of admission to technical schools was devised and put into operation at the end of the year 1917. According to the new regulations, pupils over 14 years of age who have left the public schools not more than six months previously without obtaining a graduation certificate may, on the recommendation of the school inspector, enter a free technical school. The pupils thus admitted must select subjects bearing upon a trade or industry, including agriculture and domestic science. They must not take any commercial subjects. Compulsory continued education is at present provided only at the option of the local authorities in some 17 small areas, but steps are taken to have it organized in the Dominion on a more comprehensive national basis. At the third general meeting, held in June, 1917, by the council of education, an advisory body on the matter of education, it was resolved "that it should be compulsory for every child between the ages of 14 and 17 years living within 3 miles of technical classes to attend such for three hours a week and 30 weeks a year." In compliance with this regulation of 1917, three more centers were opened for continued education of the youth.

CHILD WELFARE.

The health of school children is carefully guarded by a system of medical inspection and physical instruction which the Department of Education is vigorously pursuing. Medical inspectors do not treat, but examine, the children. In case defects are found, the parents are notified and urged to attend to the matter. If necessary, the school nurse visits the homes of the pupils and sees that satisfactory results are obtained. Medical inspectors render further assistance by delivering lectures to parents on such topics as diet, clothing, and the treatment of simple ailments. Lectures and demonstrations by medical inspectors are also regularly given to the prospective teachers in the training colleges and to instructors already in the service.

The work of physical instruction is now carried on in practically all the schools. Weak and defective children requiring special exercises are treated separately in so-called corrective classes. Great progress in the children's health has also been made in recent years by providing fresh-air schools for normal pupils.

Nor is the health of infants, i. e., children below 6 years of age, neglected. For some years New Zealand has registered the lowest percentage of infantile mortality for the entire world. This result

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is due to the splendid system of infant life protection conducted by the Department of Education and by private persons, the "Society for the Promotion of Health of Women and Children," founded in 1907 under the encouragement of Gov. and Lady Plunket. District agents and duly qualified nurses under the department visit the homes where children under 6 years of age are taken care of by their foster parents. In case the conditions surrounding the child in the foster home are found unsatisfactory, the license may be revoked and the child may be directed for care to some other place. More elaborate is the educational campaign conducted by the "Society for the Promotion of Health of Women and Children" and carried on by the so-called "Plunket nurses." These nurses are concentrated in some 70 points of the Dominion and visit both near-by centers and more remote districts in order to lend counsel and impart instruction in all that pertains to the hygiene of motherhood and the care of children. The services of the nurses, or, better, the specialists in child care, are at the call of any member of the community, rich or poor. Their duties are not properly covered by the term "nurses," as their fundamental aim is of an educational nature. Whenever a community expects the arrival of one of these nurses, the members of the local committee, who have been officially notified, make necessary arrangements for the visitor to speak at various gatherings of mothers and to hold public demonstrations relative to the care of children in addition to informal conferences in the local school and the instructional visits to the individual homes. An integral part of her duties also consists of correspondence with mothers who live in districts too remote to allow systematic visitation.

Thus the society concerns itself less with reducing the infantile death rate than with jealously safeguarding the health of children.

NATIVE SCHOOLS.

The Government supports a number of schools for the natives. At the end of 1917 there were in operation 118 native village schools attended by 4,622 Maori children. A large percentage of the Maori children also attend general public schools. A number of secondary schools for Maori children, under control of denominational bodies, are subsidized by the Government, which provides free places for the native children. According to reports of the minister of education the progress in education made by these children compares favorably with the school record of children of European parents.

SECONDARY EDUCATION.

With regard to secondary education, it is to be noted that of 9,517 pupils who in 1916 left the primary schools after having passed standard 6, 5,489 children, or 58 per cent, entered a secondary

institution. Unfortunately, few finish the course. The average length of stay is two years and nine months for boys, and two years and eight months for girls.

The types of school that provide secondary education are: Secondary schools, technical high schools, district high schools, private secondary schools, and Maori secondary schools.

There are no definite regulations governing the curriculum of secondary schools. These schools are mainly governed by the syllabuses of the various public examinations and by regulations issued by the Government with regard to the instruction of pupils holding free places. According to new regulations issued in 1917, all junior pupils holding free places in secondary schools must "receive instruction in history and civics preparatory to a course in the elementary principles of economics to be taken at a later stage." In the new regulations provision is also made for instruction in home science, cookery, laundry work, needlework, and home nursing for girls, and practical agriculture and dairy science or some other vocational subjects for boys.

TECHNICAL EDUCATION.

Technical education is gaining more ground in the Dominion, judging by the increased attendance of students at the technical schools. Irrespective of enrollment of older students, the total number receiving instruction at all the schools and technical classes was 20,747, an increase of 1,056 over the previous year. Increased demand is made for classes in engineering and agricultural subjects. In a number of centers classes for farmers were conducted on subjects bearing directly on agricultural and dairying industries. These were well attended. There was also an increase in the number of classes bearing on various trades and occupations. At 22 centers 167 discharged soldiers received free tuition in technical schools. In a number of cases where the technical school lacked the necessary equipment and workshops the school cooperated with the local firms which provided proper facilities for discharged soldiers.

HIGHER EDUCATION.

The New Zealand University is an examining body, with four affiliated teaching colleges: Auckland University College, Victoria University College, Canterbury College, and the Otago University. The New Zealand University is a Federal institution with limited powers. It can not interfere with the internal affairs of the colleges which are administered by the various councils. Each of the colleges specializes in certain directions; Auckland University College in mining and commerce, Victoria in law and science, Canterbury College in

engineering and science, and Otago University in medicine and dentistry.

The number of students in attendance at the four colleges in 1917 was 1,902—1,007 men and 895 women. This is a slight increase over the preceding year. As to the selection of courses, the majority, i. e., 44 per cent, took the arts course, 15 per cent studied medicine, 11 per cent engineering, 10 per cent law, and the rest took various other courses.

The total staff of the four colleges consisted in 1917 of 49 professors, 50 lecturers, and 32 assistants, demonstrators, etc.

With regard to new developments worth noting is the establishment of a school of architecture at the Auckland University and a course of instruction in anthropology at the University of Otago. In general the significance of ethnological studies is being more and more recognized by representative scientists, who urge that the New Zealand University should encourage this branch of learning by recognizing it in her examinations and by providing properly qualified teachers.

The New Zealand Journal of Science and Technology, 1918, vol. 1, No. 5, says editorially:

> Neglect of ethnological studies is greatly to be regretted for both individual and national reasons—individually because a knowledge of the main results of ethnological and anthropological research is a necessity for the understanding of civilized as well as of uncivilized man. The decay of custom is a long process, requiring many centuries. Thus the habits of thought of Yorkshire villages are still influenced by Scandinavian mythology. There is no section of the community more in need of such knowledge than ministers of religion. but, unfortunately, it does not yet form an essential part of their training.
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> Nationally such studies are of far-reaching importance, because of the geographical position of New Zealand. We have in our midst a race backward in civilization—the Maori—and still bound by ancient custom of thought in spite of a veneer of alien culture. The proper treatment of the many problems thus involved is impossible without a knowledge of ethnology, and of the Maori people themselves, on the part of the legislators and electors. The probable absorption of the Maoris in the people of the North Island will produce a type differing from that in the South Island, and it is desirable that this problem should be properly envisaged by our thinkers.
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> Any future expansion of New Zealand in the Pacific islands will bring further problems, for all of which ethnological knowledge will be necessary. Those who are directly concerned in the administration of these islands should above all receive such a training. New Zealand must play a part of some kind during the next five hundred years in the solution of the color problem—the relations between black, yellow, and white peoples. If it is to be a worthy part, there must be an increase of ethnological studies. This does not mean that a new subject should be introduced into the syllabus of the primary and secondary schools, for it would even now be possible for a teacher with the necessary knowledge to introduce very interesting and educative lessons on ethnology into the geography course. But a prior necessity is the training of teachers to a higher standard, and a beginning should therefore be made in the university.

Extensive revision has also been made of the courses of study at the Otago University School of Mines. The period of studies in mining, metallurgy, and geology has been lengthened from three to four years, of which the first three years of study are common to all three divisions and specialization occurs in the fourth. By this means a greater amount of general and especially geological training is given to students of all divisions, while additional advanced courses have been introduced in mining, metallurgy, and workshop practice.

In addition to the class work, all students must spend 12 months in practical work, the length of the vacation being arranged so as to permit the student to complete this work by the time the class work is finished. All students must spend at least four months in underground mining work, while an additional eight months must be spent in mining, metallurgical work, or in geological surveying, and a thesis prepared descriptive of some mining operations, a metallurgical process, or the geology of an approved area according to the division in which the student specializes.

SCIENTIFIC RESEARCH.

The importance of scientific research for the advancement of industrial efficiency has been realized in New Zealand, as in other parts of the British Empire, in the early days of the war. An attempt to coordinate science and industry was made as early as 1915, when several scientific and other bodies in New Zealand had been considering in what manner scientific and industrial research might be organized in the Dominion. The matter received, however, no official consideration until some time later, when at the request of the acting prime minister, the national efficiency board, in coordination with several other scientific bodies, evolved a scheme which was forwarded to the Government in January, 1918.

Some of the provisions of the proposed scheme are:

1. There should be established a board of science and industry, with responsible functions and substantial authority to encourage and coordinate scientific and industrial research in the Dominion.

2. There should be a minister of science and industry, who should be the chairman of the board.

3. An adequate sum, not less than £100,000, should be voted by Parliament to cover the expenditures for five years.

The board is also to have power to establish, award, and supervise fellowships and to see that the fellowship, tenable for two years, should be of sufficient value to prevent the holders from being attracted to other positions.

It was also suggested that the board of science and industry might (*a*) advise primary producers upon all questions of the application of

science to their industries; (*b*) advise persons, firms, or companies engaged in industrial pursuits as to improvements in the arts and processes employed, and as to the utilization of waste products; (*c*) make recommendations as to the adoption in an industry of the results of investigations conducted under its direction; (*d*) undertake the investigation of industrial problems which, if unsolved, would obstruct the development of the industries concerned; (*e*) advise the Government in regard to the help that should be given to any new industry that is likely to be ultimately of value to the country, though at first it may not be workable except at a loss; (*f*) advise the Government as to which contribution, if any, should be made toward the cost of any research by the firms or companies benefited thereby; (*g*) on the request of the University of New Zealand, consult with that body in matters relating to the national research scholarships in its award; (*h*) consult with the General Council of Education, the University of New Zealand, the university colleges, and other educational bodies as to the line along which there could be brought about an improvement in scientific education, and cooperate with them and all others concerned in taking such steps as may lead to the better appreciation of the aims and advantages of science on the part of producers and the general body of citizens.

RECENT PROGRESS OF EDUCATION IN THE UNION OF SOUTH AFRICA.

By Theresa Bach,

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GENERAL DEVELOPMENT.

The Union, constituted by an act of Parliament in 1909, comprises the former self-governing colonies, the Cape of Good Hope, Natal, the Transvaal, and the Orange River Colony, known at present as the Orange Free State. The executive power is vested in the governor general, appointed by the British sovereign, and a cabinet of ministers, the members of which are chosen by the governor. Each Province is administered by a provincial council, with power to deal with elementary and secondary education. Higher education, in accordance with the act, is placed under the control of the minister of education for the Union.

The system of education maintained in the four Provinces is concerned primarily with the children of white parents. The education of the natives, who form the bulk of the population, remains in

the hands of the missionaries, who maintain their own mission schools. The Government exercises some control over these schools and gives its financial support in the form of grants-in-aid. In all the Provinces education was made compulsory for the children of European extraction. No such provision exists for the children of other races. In some of the Provinces the tendency to increase educational facilities and to raise the compulsory age of the pupils has, in recent years, received official sanction by direct legislative measures.

So, for instance, at the Cape of Good Hope one of the most important features of the year 1917 was the amendment relating to compulsory school attendance of European children. An ordinance passed by the provincial council in 1917 makes the leaving age 15 instead of 14 and the leaving standard V instead of IV. The principle underlying compulsory education in that Province dates from the year 1905, when a school board act was passed making attendance compulsory for every child over 7 years of age and living within 3 miles of a State-aided school. Exemption from school was granted with the attainment of the age of 14 or the passing of Standard IV of the elementary school course. A further step in that direction was made in 1913 when it was generally felt that the time was ripe for an extension of the principle of compulsion. Accordingly, ordinance 16 of 1913 made it possible for the distance limit, the exemption age, and the exemption standard to be raised in selected areas. Finally, by ordinance 7 of 1917, the minimum exemption age for the whole Province was raised to 15 and the minimum school year to Standard V. The school authorities in the Cape Province are not satisfied, however, with the results attained, and point to the need of further compulsory extension for white children. Draft ordinance of 1919 contains the following paragraph:

> From and after the commencement of this ordinance regular school attendance shall be compulsory in the Cape Province for all children of European parentage or extraction who have completed their sixth but not their sixteenth year.

The important matter of free tuition is mandatory at the Cape only up to the compulsory limits. Consequently with the extension of the compulsory school age an attempt was made to extend the privilege of free tuition "up to and including the sixth standard of the primary-school course." A move in that direction can be seen in ordinance No. 15 of 1917 that empowers the department under certain conditions to pay the school fees of children whose parents are on active military service. This regulation applies not only to pupils attending schools under school boards but is applicable to any school not conducted for private profit.

Legislative measures for a larger school life have not been limited to the Cape of Good Hope. In the Province of the Transvaal a provision in ordinance No. 16 of 1916, issued by the Department of Education, authorizes the local school boards to raise the age and the standard of compulsion, if it is found desirable. This means that children over 15 years of age or those having reached the fifth standard may be compelled to continue their education at the option of the school boards. Furthermore, attendance in continuation classes can be made compulsory for children who are exempt from attendance at primary schools.

With regard to compulsory attendance in the Transvaal, various recommendations are proposed. Some school boards advocate that compulsory education should end with the attainment of the seventeenth year of age or the passing of the fifth standard; others recommend the sixteenth year as the age limit or the sixth standard as an alternative. As to compulsory continuation classes, there is a tendency to have the pupils attend school during the working hours for at least 10 hours a week.

Another regulation bearing upon increased school facilities for the children in that Province provides that a public school may be established in any country district where the attendance of not less than 20 pupils can be assured. The former regulation required a minimum attendance of 25. Although the present tendency of the department is directed toward centralization—that is, toward larger schools with a larger school attendance—the lowering of the requirements with regard to the establishment of other schools was necessitated in order to meet the needs of children who could not otherwise be brought within the reach of larger institutions.

A scheme inaugurated by the Department of Education in the Transvaal further provides Government grants for private schools recognized by the authorities as efficient. These grants will undoubtedly raise the standard of the private institutions and bring them in line with the schools controlled and administered by the various school boards of the Province.

At the end of September, 1917, the total number of white pupils enrolled was 116,491; of native and colored children, 138,397. The total number of pupils enrolled in Government-aided schools was 254,888, the average attendance being 86.4 per cent. The total number of teachers was 10,215, of whom 6,739 were holders of professional certificates.

The Government's expenditure on education during the fiscal year ended March 31, 1917, was $4,751,000, thus apportioned: Head office (administration), $51,000; inspection, including transportation, $189,000; training of teachers, $429,000; schools under school boards (grants in aid), $2,979,000; schools not under school boards,

$182,000; schools under missionary control, $556,000; industrial schools, $80,000; good-service allowance, $260,000; pension fund, $22,000; incidental expenses, $3,000.

LANGUAGE PROBLEMS.

The language question presents considerable difficulties in South Africa. At present English and Dutch are recognized as the official languages in the Union, a fact which affects the schools to a considerable degree. In the Cape Peninsula instruction in the mother tongue is provided up to and including Standard IV, when the second language is gradually introduced. The languages hitherto taught in public schools were either Dutch or English, but as the conversational medium of large circles of the population is Afrikaans, or Africander Dutch, the school authorities sanctioned the introduction of this tongue as a regular school subject in the non-English classes. The more literary Dutch has thus been superseded by Afrikaans, especially in the lower grades of the elementary course. An ordinance promulgated on May 17, 1918, and known as Education (Afrikaans) Ordinance No. 14, 1918, reads:

Where in any public school to which the provisions of the Education (Language) Ordnance No. 11 of 1912 apply, the Dutch language is lawfully used either as a prevailing medium or as one of the media of instruction, it shall be competent for the Department of Public Education, on the resolution of the responsible school committee, or school board where there is no committee, to authorize the use of Afrikaans instead of Dutch (Nederlands) as such medium of instruction in all or in any classes of that school up to and including the fourth standard.

Thus by adopting Afrikaans the Cape of Good Hope has set itself to solve the problem of not two but practically three languages. The ordinance also permits pupil teachers to answer examination papers in Afrikaans, as well as in Dutch or English.

In the Transvaal the use of Afrikaans as a medium of instruction was sanctioned by the school authorities sometime ago. Of more recent date is the introduction of Afrikaans as a school subject. This radical change has been universally welcomed by teachers and pupils in schools where hitherto Dutch was the medium of instruction. In many instances, however, the introduction of Afrikaans had to be postponed for lack of the necessary textbooks.

One of the school inspectors in the Transvaal, referring to the new ordinance (Transvaal Educ. Dept. Rep., 1917), states:

Great things are expected of Afrikaans, and teachers are everywhere enthusiastically studying the subject in order to "see it through." For the first time in the history of the Africander child he will find himself in a position of real equality with the other European children. In the past the study of language (which after all is little more than a medium of thought) was tak-

ing up practically all his time, while children of other countries were absorbing new ideas almost from the day they entered school.

In Natal, which is colonized almost throughout by British, the bi-lingual ordinance came first into operation in the year 1916, although a practical bi-lingualism has long obtained there with the approval of the department. The new ordinance reserves to the parents the right to decide as to the medium in which their children shall be instructed. In the Orange Free State, except where the parents object, both English and Dutch are taught to all children, and where possible, are used as equal media of instruction.

The provisions of the language ordinances in the various provinces are usually met by setting up parallel classes in the lower standards and then teaching each language in its own medium; general subjects, such as history and geography are taught in the higher grades in a mixed medium, unless the school is large enough to allow of a similar arrangement as prevails in the lower standards.

SECONDARY EDUCATION.

Provision for secondary education is made by public high schools or by advanced classes connected with the elementary schools. Present efforts are directed to the promotion of these classes to high-school grades wherever the scheme appears to be feasible. In the Province of the Transvaal 10 high schools have thus been created in addition to the 10 already in existence. The question of transition from primary to secondary schools has not been entirely settled in that Province. The Transvaal Teachers' Association is of opinion that separate high schools should be built only for pupils who intend to matriculate.

For the rest of the pupils the association urges the maintenance of advanced classes in the primary schools. The reason given by this body of teachers is that transfer to a secondary institution will cause many pupils to drop out. The stand taken by the higher school authorities, on the contrary, favors the separation of primary and secondary schools. Discussing the advantages accruing from the latter arrangement, the director of education for the Transvaal, in his report for 1917, says:

> It (the transfer) is an event which stirs and satisfies the impulses and ambitions characteristic of the awakening of adolescence. The spirit of adolescence is the spirit of adventure; it is a time when hunger for intellectual achievement, for the life and associations of youth, for freedom from the trammels of childhood, is imperative. Migration to a higher institution is just what satisfies it. Transfer is thus, in the first place, justified by the physical and mental demands of the pupils themselves. In the second place, it is justified by the criterion of efficiency. This will more certainly be gained in an institution where the head and his staff devote themselves entirely to secondary needs

and secondary subjects. Economy is a third argument. Science is going to bulk largely in secondary curricula in the future, and well-equipped laboratories will be essential. They can not be provided at a large number of centers. The same thing is true of libraries which must be good enough to afford a field for adventure in history and literature. Finally, there is the all-important question of playing fields and organized games. The first 11 caps or colors won in strenuous competition is the ambition of normal youth.

In the Cape of Good Hope better adjustment and the abolition of the overlapping between the elementary and the secondary school course have been effected in recent years. The seventh grade of the elementary schools was abolished and the elementary course confined to six grades, these to be superseded by the secondary school course with a four-year syllabus.

The secondary course is to be reorganized with a view of providing general and vocational training. This, at least, is the proposal of Dr. Viljoen, the superintendent general of the Cape Province, made before the Congress of the South African Educational Union, held on December 27, 1918. The scheme involves the inauguration of eight courses, each with a four-year syllabus: A preparatory course leading to higher education, and a general course for those not intending to pursue university studies; further, preparatory courses for the public service, the teaching profession, and the courses suitable for those who intend to adopt commercial, technical, agricultural, or domestic pursuits. It is proposed to introduce these courses in a limited number by way of experiment rather than to lay down hard-and-fast rules and regulations for the entire scheme.

Training of teachers.—With regard to the training of teachers in the Cape Province, several tentative proposals have been made by Dr. Viljoen.

The present third class teachers' certificate (senior) course is to be replaced by a lower primary teachers' certificate course, to commence after Standard VI of the primary school course had been completed and to extend over a period of four years. Further, the superintendent general proposed the establishment at training colleges of a higher primary teachers' course extending over a period of two years beginning after the completion of a full four years' course at a secondary school. In addition to these two courses the training schools and colleges are to offer courses for teachers in infant schools and for those intending to specialize in subjects such as domestic science, manual training, drawing, music, commercial subjects, etc.

The supply of certificated teachers, although inadequate for existing needs, shows a steady increase, if one makes reference to the records of the year ended June 30, 1918. It appears that the teaching posts in the Cape Province increased during the year by 198; the number of certificated teachers employed increased by 255; while the

number of uncertificated teachers employed decreased by 57. Compared with other Provinces of the Union the Cape employs 39 certificated teachers for every 1,000 enrolled pupils, while the Transvaal employs 25 certificated teachers, and the Orange Free State 28 on that basis.

AGRICULTURAL EDUCATION.

Scientific training in the principles of agriculture and stock raising is making rapid strides in the Union. This training is carried on at four well-equipped agricultural schools conducted by the Department of Agriculture, as well as a number of experimental farms. Two of these schools are situated in the Cape Province, one at Elsenburg and the other at Grootfontein. The third is located at Potchefstroom, Transvaal, and the fourth at Cadara, Natal. A fifth school has been built near Bloemfontein, Orange Free State, but due to the war conditions, its inauguration has been postponed. The cultivation of the soil, experimentation in plants, and the breeding of cattle are conducted on an extensive scale, not only for the benefit of the students enrolled, but also for the general farming population. Horticultural and poultry divisions are maintained in connection with each institution. Admission is based on the completion of the elementary school. The regular course of instruction covers a period of two years. Special short courses are also given during the months of June and July each year. These institutions also assist the farmer in matters relating to the various phases of farming by means of correspondence, publications, lectures, and demonstrations.

Experiments in soils, crops, and fertilizers are conducted at the school farms, at detached experimental stations, and by means of cooperative experiments with individual farmers.

The Government Wine Farm near Cape Town offers a three years' practical training with some theoretical instruction. Agricultural faculties have also been established at the University of Stellenbosch, and at the Transvaal University College, which now forms part of the University of South Africa.

COLLEGES AND UNIVERSITIES.

The university problem, closely connected with the political and social conditions of the country, have in recent years undergone far-reaching changes advocated in South Africa for the last decade. With the inauguration of the Union, higher education was placed under the control of the central authorities or the minister of education. Until a few years ago the university was a purely examining body, which dominated a number of small colleges serving only local interests. Various proposals for the creation of a strong national university, where the youth of the country could receive a common intellectual training, led to legislative measures with the

result that the entire system of university education in South Africa was placed on a higher plane.

The new scheme put in operation April 2, 1918, was reorganized on the following basis:

1. The South African College became the University of Cape Town.

2. The Victoria College at Stellenbosch was granted a separate charter and became the University of Stellenbosch.

3. The six remaining colleges—those at Grahamstown, Wellington, Bloemfontein, Pretoria, Johannesburg, and Pietermaritzburg—were federated in the University of South Africa, a successor of the University of the Cape of Good Hope, with the administrative seat at Pretoria.

The policy of the newly created institutions is reflected in the following statement from a Cape Town correspondent published in the London Times Educational Supplement for February 13, 1919:

> The University of Stellenbosch shows a strong tendency to ally itself with pronounced Dutch-Nationalist sentiment, and has already become its chief intellectual center. Its students are almost exclusively Dutch-speaking, and instruction is being increasingly given through the medium of the Dutch language. Indeed, so strong has the feeling of separate identity become that even simplified Netherlands Dutch is in danger of being cast out in favor of South African Dutch (Afrikaans). It would seem that the future of the University of Stellenbosch is largely bound up with the fate of Afrikaans. If that language succeeds in establishing itself as the recognized sister medium to English, and in developing a literature (as it shows promise of doing), and if the government of the university is alive to the dangers of an exclusive parochialism, especially in the matter of appointments to the staff, then the University of Stellenbosch will become an intellectual and moral center of influence of a peculiarly interesting and valuable type.
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> The University of Cape Town continues the tradition of the old South African College, which always earned the kicks of extremists from either side because of the broad South African nationalism which has always characterized it. Ordinarily (though the war has made a difference) its students have been English and Dutch in about equal numbers, and the bitter political and racial struggles of the country have had but faint echoes within its walls. During the war it has been criticized with about equal vehemence by the left wing of each racial group, and the present confidence it enjoys and the phenomenal development it has recently achieved abundantly justify its maintenance of the old attitude. Language difficulties are well-nigh insuperable, but they are being handled in a reasonable spirit.

Stellenbosch specializes in agriculture, while the University of Cape Town is developing the faculties of engineering and medicine. The faculties of law and education are also likely to become stronger in the latter institution.

EDUCATION OF NONEUROPEAN CHILDREN.

The non-European population comprises the natives, the mixed races or the Eurafricans, and a small contingent of East Indians.

The education of the natives is entirely the work of missionary organizations. The Government supports the mission schools by means of grants, but the maintenance of schools devolves upon the missionary bodies. Government control over native education is exercised through the following agencies: Financial grants-in-aid, certification of teachers, issuing of syllabuses, inspection of schools, and examination of pupils. The course of study is based on the European system, with slight modifications to suit the native children. Instruction in all the Provinces is imparted through the medium of the vernacular, especially in the lower grades.

The introduction of handicrafts in native schools on a larger scale than has hitherto been practiced is being urged by school authorities familiar with the problem of native education. One inspector of schools points out that "pupils accustomed to the free unfettered life of the veld and kraal must find some outlet." And nothing, he maintains, would so alleviate the sudden transition from the unrestrained liberty of the herdboy to the ordered discipline of a school than lessons in grass weaving, clay modeling, woodwork, and needlework. These subjects should be encouraged and introduced in all the schools for native children. Consideration of industrial training to include instruction in agriculture and the native arts and crafts is also urged by Dr. Loram, an inspector in Natal. In his book "The Education of the South African Native" the author recommends the taking over by the Government of all the native schools with a view of establishing a well articulated system which shall consist of elementary, intermediate, high, and industrial schools and training institutions with courses of study complying with the social and industrial needs of the natives. The retention of the vernacular is also strongly recommended.

Missionary organizations provide schools not only for the native but also for other colored children in all the Provinces except the Transvaal. In that Province the schools for Eurafricans are under direct administration of the department and are supervised by the school boards on the same basis as the schools for Europeans. At the close of the year 1917 there were in that Province, in addition to schools for European children, 19 Government schools for colored children, with an enrollment of 2,681, and 330 subsidized mission schools with an enrollment of 21,421.

In addition to the mission schools, the Government subsidized a number of Indian schools, notably in Natal, where 39 such schools receive grants-in-aid, while 5 schools for Indian children are directly maintained by the department of that Province.

THE PROGRESS OF EDUCATION IN INDIA.

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INTRODUCTION.

In no other country of the world is the subject of education more complicated than in India. The system maintained or sanctioned in the 15 Provinces which are directly or indirectly under British control is further complicated by considerations indissolubly intertwined with the historical, climatic, racial, religious, and strictly agricultural characteristics of the people. Historically, the system still shows in many fundamental features of the vernacular schools the native system which prevailed in the larger and more powerful Provinces—such as Bengal, Bombay, and Madras—before the official consolidation of British power about 60 years ago; and the successive modifications made by the several education commissions, provincial and imperial, have left indelible traces upon it.

India's racial complexity is a commonplace, more than 40 distinct races going to make up her total population of over 250,000,000 (estimated, 1919). As a consequence the several Provinces representing the original nuclei of diverse tribes have developed widely varying systems of administration and instruction. This tendency has been fostered by the definite policy of the British Government, which has been loath to attempt to impose upon India, as a whole, one rigid and uniform system, but has wisely sought to confine itself to maintaining educational activities in their broadest and most useful aspect. The difficulties inherent in religious differences and jealousies, and in their inevitable consequence, the caste system, were unlimited; and even a partially successful harmonizing of these, so far as to effect some system of popular instruction, is in itself a triumph for British colonial ability. Yet in face of all these abstacles, multiplied in many phases in almost every Province, more than fair success has been achieved since the original lines of educational polity for India were laid down. Marked progress is to be recorded, especially during the last reported quinquennium (1912–1917), the period adopted by the Indian authorities for a systematic and comprehensive report upon the educational conditions of the Provinces.

A consideration of the effects of the war, direct and indirect, on Indian education must necessarily precede a more detailed investigation of conditions in that country. The former have varied according to the location of the Province under consideration, whether situated upon the sea coast, and possessing a large port of embarka-

tion of men and supplies, or remote from visible connection with the war. To select from those most closely concerned with the war: In the Madras Presidency, perhaps the most marked effects were the cutting off of the recruiting of teachers from England and Europe and the vacancies due to the withdrawal of the teachers for service; financial difficulties of growing seriousness making it necessary to postpone many educational projects; and, perhaps most marked for this Province, the difficulties encountered in the matter of the missionary societies maintaining a system of schools. Most of these were German and Lutheran educational missions; and their taking over by the Government and continuation with changed committees were fraught with many perplexing questions.

In the Bombay Presidency the effects just noticed were also evident; but in this Province a greater gain has been pronounced in the interest aroused among people of all classes, not merely among the children in the schools, in the great world issues, in the broadening of knowledge and mental horizon, and in the quickened appreciation of the unity of the British Empire. In Bombay the very useful step was taken of applying the machinery of the schools to explain to the people at large the real causes and progress of the war. This was done by daily talks by the teachers, by the periodical visits of the inspectors, by the dissemination of Indian newspapers and pamphlets translated into the different vernaculars of the Presidency, by lectures and lessons on the war loans, and by the offer of prizes for the best essays on the war written by students of secondary and higher education. It is doubtful if all other activities of the schools were as valuable for the mental awakening of the people as this, which might be regarded as merely a by-product of the war.

In Burma fewer adverse effects of the war are to be noted than in any other Province. Though for economic reasons attendance declined in the lower primary vernacular schools, many important changes in administration and instruction were carried out especially during the last two years of the quinquennium under consideration. The long-discussed and very important transfer of municipal schools to the provincial government was finally effected early in 1917; grants of half the salaries of teachers were restored in the European schools and in most of the aided Anglo-vernacular schools; and the maintenance of these schools was transferred to the Province. Other special administrative changes will be indicated under their proper headings.

In the larger field of education throughout the Indian Empire financial considerations for the first two years of the war stopped the allotment of the imperial grants decreed in 1904. In certain Provinces a marked decrease was shown in the attendance in the primary schools. But as an offset to these material disadvantages

there were compensating advantages throughout India at large as indicated in the reports of representative Provinces.

The most vigorous stimulation of educational interests has come, within the past two years, from a far-reaching project of political independence for India, culminating in the presentation to the House of Commons of the Montagu-Chelmsford Report in July, 1918. The officials whose names are thus linked are the secretary of state for India and the viceroy. Both were thoroughly conversant with the needs of India; both had for years studied the part that education must play in the political welfare of the peninsula; and the report, in its largeness of view, its exalted vision, its kindly sanity, and its deep sympathy with the unrepresented millions and even with the classes depressed by the oriental caste system, is an honor to British provincial administration. It is difficult to believe that barely a century marks the difference in time between the spirit of this report and that of rulers of the type of Warren Hastings. The broad outlines of the report are as follows:

1. The report prefaces its review of political and social conditions with a survey of the evolution and present state of education in India, basing all recommendations upon the prinicple that "educational extension and reform must inevitably play an important part in all political progress of the country."

2. The report concludes that the original decision of 1835, with which the name of Lord Macaulay has always been connected, to impart western education to the natives by the medium of English was at that time the right and indeed the only road. The varied demand for enlarged opportunities, now rising with increasing force and including always more people, is itself only the logical result and the vindication of the work laid down by that decision; but—

3. It has brought an illiteracy of the masses and an uneven distribution of education which must be ended. No state of affairs which includes 6 per cent of the total population literate and less than 4 per cent under instruction can be longer tolerated.

4. The steadily growing cleavage between the educated minority and the illiterate majority is the necessary result of the educational system adopted, and the fruitful cause of political and social unrest. From every point of view this cleavage must be stopped; reforms in education must precede all attempts at governmental and political reform.

5. Results which have been economically disastrous have been manifest in the fact that the exclusively literary system of higher education has produced a growing native *intelligentsia*, which can

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not find employment and becomes humiliated and soured, affording the best possible soil for discontented and anarchistic teachings. Education is directly responsible for this political and governmental ulcer on the body of the country. Only of late years has any complaint arisen against the real element which is wrong in the situation, namely, the inadequacy of facilities for training in manufactures, commerce, and the application of science to active industrial life.

6. Examining the charge that the traditional educational system of India has failed in character development, the report finds that the question trenches upon the very complicated domain of religious belief, which in India, as in all primitive countries, is crystallized along racial lines. The Governmental schools have either utterly ignored the problem and attempted no moral instruction, or, if a few here and there have attempted it, the disadvantages under which the teachers labor, the indifference of children, and the hostility of parents have been so great as to nullify all attempts. The mission schools alone have dared to inculcate ideas of duty, discipline, and civic responsibilities and obligations, and in this field they have had results which are worthy of admiration.

7. The report, replying to the criticisms of the very limited diffusion of education in India, recalls the conservative prejudices of the country which rigidly maintaned themselves until the world events of the last few years suddenly began to break them up. That they are breaking and yielding is seen in India's undeniable change of attitude toward female education. But nothing has yet been done to put an end to the profound educational disparity between the sexes which must always hopelessly retard any real social or political progress. Again, peculiar difficulties arise from the predominantly agricultural nature of the population. Such a population, traditionally suspicious of change, can be reached only by making agricultural education increasingly practical. At bottom must always rest the need of differentiating primary education according to the needs of the people to whom it is applied.

8. The report concludes by emphasizing the urgent necessity of an enormous development of educational opportunities side by side with any extension of political activities, basing all upon the contention that "political thought in India is coming to recognize that advance in all lines must be influenced by the general educational level of the country."

Another report, akin in spirit to the Montagu-Chelmsford Report and upon which were based many of its conclusions, was the Industrial Commission Report, presented early in 1918 and embodying the results of many months of investigation in the leading Provinces of India. Though primarily economic in subject and aim, it, like the Montagu-Chelmsford Report, was of distinct value educationally.

It brought clearly to the front the extreme "topheaviness" of a system of education in which less than 3 per cent of the total population are enrolled in the elementary schools; in which the average duration of school life is less than four years and nearly half the children are in the infant sections of the primary; and in which a relapse into illiteracy in adult life is the rule; whereas in the field of higher education the percentage of total population enrolled, one-twentieth of 1 per cent, is nearly equal to that of England, one-sixteenth of 1 per cent, and considerably larger than that of Japan, one-thirtieth of 1 per cent. In the field of university education alone, India shows one-fortieth of 1 per cent to Japan's one-seventieth of 1 per cent of total population. In the estimation of the report, this "topheaviness" could only be cured by an efficient, free, and compulsory system of education, and by the building up of a modern progressive and economic society. Furthermore, India is the only country in the world where the educational ladder, fragmentary at best, has its higher end in another country. This evil, too, must be cured by the further establishment in India of centers of professional and cultural learning for native Indians, themselves graduates of the continuous system of schools below.

ADMINISTRATION OF SCHOOLS.

In the domain of administration as such the student of Indian education is confronted at the outset by the lack of any compulsory power vested in the central imperial educational authority. No parent is compelled by imperial regulation to send his child to school; nor is any person prohibited from opening a school or positively required to take out a license in order to do so. The system is decentralized throughout.

As regards the relation of the Imperial Indian Government to education, in general it may be said that it is advisory and promotive:

> The Government of India * * * considers questions of general policy, correlates when necessary the lines of advance made in the various Provinces, examines, approves, or submits to the secretary of state for India schemes which are beyond the sanctioning power of the local governments, and allots imperial grants.

In order to administer the increasingly larger field covered by these activities, the post of director general of education was abolished in 1910, and a member for education was added to the imperial executive council. In April, 1915, the post of Educational Commissioner was created, whose duties are somewhat akin to those of the Commissioner of Education of the United States:

> He tours extensively, discusses questions of educational polity with local governments, and advises the department on educational cases. At the same time a small bureau of education was reestablished for the collection and dissemination of information.

Each provincial government has a department of public instruction, presided over by an official usually designated as the director of public instruction, appointed by the provincial government. On the side of public education the educational powers of the Province are shared with local bodies such as rural boards, municipalities, and even private associations and individuals. All these latter are themselves required by law to provide facilities for primary education, and some are permitted to provide other forms of education in addition. The first piece of educational legislation of a compulsory nature ever enacted in India was that passed by the legislature of Bengal early in 1918. The act is noteworthy in that it is constructed entirely along the decentralizing and autonomous lines which form the distinctive feature of the Montagu-Chelmsford Report; and so representative is it of the dominant thought of the most advanced Provinces that the councils of Madras, the Punjab, and Behar have signified favorable action if it should be submitted to them. It strikes at the very root of the mass illiteracy of the Province, applying its provisions equally to both sexes (a signal advance over eight years ago, when a similar provision was defeated), making the period of compulsion to include the whole of the child's eleventh year and thus giving a minimum of five years of school attendance. The compulsory feature is not, as yet, applied to rural areas, but schools are provided in each of the more than 1,100 villages of the Province containing more than 1,000 inhabitants and at present without a primary school. No fees are allowed to be charged in any grade of school work.

Any class or community may be exempted from the operation of the act by the local provincial government only in such case as the municipality can not arrange satisfactorily the education of such children, and they are properly instructed by other means. In the vital matter of imposing penalties upon those persons employing for profit children who ought to be in school, it is to be regretted that economic interests caused a departure from similar provisions laid down in the Fisher Act; and so fully recognized was the national necessity of child labor both in organized industries, on farms, and in the home, as to call for compromise by which only those are subject to penalty who employ children of school age in such ways and at such hours as to interfere with their efficient instruction.

The weak point of the act is, confessedly, the vagueness of the responsibilities of the State in the event that local bodies, through poverty or neglect, fail to provide proper instruction. But the continuance of the Government quota to local bodies is in no way affected by the act; and the lively interest uninterruptedly manifested by the provincial governments in the past furnishes

every guarantee that the danger of the Government not making subsidies to deserving local boards is imaginary. Indeed, much is expected in the way of the development of local independence from the very knowledge that local delinquency can not as now rely upon the provincial government to supplement inadequate appropriations. The act has been commended by the school and secular press. The Times of India well summarizes the situation in saying that the act must and will be applied "along the sound principle that whether State finances are flourishing or the reverse, primary education is a necessity for which money must be found."

As regards the machinery by which provincial governments administer public instruction, the director controls a staff of inspectors and the teaching staff of the schools in so far as the teachers are employed by the Government, and performs such other duties and wield such other powers as usually belong to him in his capacity of agent of the provincial government. The organization of the inspectional machinery is generally based upon the unit of the revenue division of the Government. In the Punjab, however, and in Bengal, as secondary schools are numerous, second and assistant inspectors are added, generally in charge of all local education, and are expected to advise the divisional school officials on policies and related matters. The detailed inspection of primary schools, however, is incumbent upon deputy inspectors, one for each district. There are also special inspectors for European schools, for Mohammedan education, and in localities where they are needed, for the teaching of Sanskrit, Arabic, and Persian. In the larger cities expert inspectors have recently been appointed in the subjects of manual training, drawing, and science. In addition inspectresses for girls' schools are employed so far as the climatic and social conditions make it possible. Medical inspection has made encouraging progress, especially in the Punjab and in Bihar and Orissa, in spite of the serious interruptions caused by the war.

Unfortunately, all the Provinces report grave limitations in the inadequate number of inspectors, in the narrowed scope of the work possible, and in a popular indifference which cripples the efficiency of the service. The reports show also that the inspectional system, if it is to give adequate supervision to primary schools, especially those in villages and remote districts, urgently needs clearer definition and better coordination of its several agencies and a large increase (especially in Bengal, Bombay, and Madras) of the inspecting staff, burdened as this is by many new duties of increasing complexity.

The most important agency, however, both of control and direct management is constituted by the local educational bodies, which include rural boards and municipalities. Indeed, they may be regarded as the foundation upon which the primary educational system

of India rests. Varying widely in areas covered in the several Provinces, the rural boards are supreme in matters of education and in those pertaining to means of communication. Municipal boards in cities and towns have corresponding responsibilities of providing instruction. The supreme importance of the functions performed by the local bodies of both types, and the wide diversity of their responsibilities and scope, well illustrate the decentralized nature of educational polity in India. A summary of the salient legal powers and duties in the several Provinces is given:

1. In Madras the municipal act requires the municipality to provide for the school instruction of all children of school age, but the responsibility is limited by the phrase "so far as the funds at their disposal may admit."

2. In Bombay and the United Provinces the law requires reasonable provision for primary schools. In the latter the act requires the municipalities to expend on primary education at least 5 per cent of their normal income after the deduction of income from special modes of taxation. In the city of Bombay the law requires the corporation to make adequate provision for maintaining, aiding, and accommodating private schools, but provides that in the event of education becoming free or free and compulsory, one-third of the additional cost shall be paid by the Government.

3. In Bengal the former rule requiring the municipality to spend 3.2 per cent of its ordinary income on education has been repealed, but this is taken as a suitable standard; and also in the Punjab, Burma, and the central Provinces the acts are permissive only, requiring only the application of certain funds to the object of education, with varying requirements as to the funds from which such funds are to be drawn. In Burma it is provided that the maximum expenditure for education shall not exceed 5 per cent of the gross annual income.

4. In Assam it is provided that the percentage spent on primary education must not fall short of that represented by the average of the expenditure of the previous year and that of the year 1904–5, which is taken as a representative basis. The establishment of a board charged with oversight of all primary and middle vernacular schools is left optional with the Government.

5. The procedure throughout India varies greatly in the grades of schools under the charge of local bodies. In the majority of the Provinces the functions of local bodies are not limited to primary education, but their chief concern is with the primary schools. Most of them give aid to privately managed schools, and therefore wield a legal power over the latter. The extent and method by which the provincial government shares in the maintenance and control of primary schools are of great complexity. In most instances the provincial government is largely guided by the advice and wish of the local board, provided always that the latter evinces reasonable generosity and feeling of responsibility for primary education.

During the five years under consideration the most marked tendency both in Government and education was that to grant wider and larger powers of government to the local authorities. This culminated in June, 1918, in the plan issued by the Imperial Government of India, definitely disclaiming any policy of general compulsion as being unwise under present conditions, but urging all local bodies to assume the burden of "a solid advance toward mass education." The additional expenditure for teachers and inspection is to be

borne by imperial and local governments, that for the establishment and maintenance of physical facilities, buildings, etc., necessary to double the enrollment of boys in the primary schools—the goal set within 10 years—to be borne by the local boards.

As matters stood up to that time, local bodies managed the comparatively few local "provided" schools and had control of aided schools. Up to 10 years ago, three-fourths of the primary schools were under private management, but since that time the tendency has been for "provided" schools to gain much faster than aided (missionary) or unaided (native) schools; so that in 1917 more than half the pupils throughout India in attendance on primary instruction were in these schools. An interesting exception must be made in the case of Burma, the Province which shows the highest percentage of literates. Here primary education is in the hands of the Buddhist monks. Elsewhere unaided schools diminished and provided schools increased so rapidly that the authorities see in this a proof that "there was left no large outer circle of indigenous institutions suitable for inclusion in the public-school system." The reasons for the rapid growth of board schools during the past five years are that better education can be secured and at less than half the cost of the unaided school, and that pupils remain much longer in school. The policy of expanding primary schools, of including aided (missionary) schools, and of encouraging unaided schools also to come under Government management has been steadily pursued by the school authorities. Under the new action of the Imperial Government of India, wider scope for initiative has been allowed the local boards; but the duty still rests upon provincial governments to encourage primary education and, where needed, to assist in maintaining it by special educational grants.

It has been shown that the Imperial Government has little control over education, yet it plays a great part in aiding schools, chiefly out of funds realized by nation-wide taxation. According to local needs, it is free to make, and does make, a considerable assignment of revenues for definite educational purposes. Similarly, local and municipal funds realized by taxes (usually from "land-cesses") levied by local bodies may be supplemented by provincial funds. In general, the elasticity with which taxes of either of the three categories may be applied to educational purposes is absolute, being limited only by the provision that funds of, and for, a given Province may not be diverted to another.

As an offset to the wider power and greater responsibility assigned to the local boards as indicated above, a contrary tendency is to be noted in the way of administrative centralization. This is not general, but as it concerns the two great Provinces of Bengal and Bom-

bay it should not be passed over without mention. In them decrees in council have transferred certain duties formally wielded by the boards to the inspectors and to the college authorities, and have delegated executive functions to the directors of secondary schools. It is claimed that efficiency has been secured without a sacrifice of the good of the schools. In Bengal especially the result has been to vest in the director of public education powers hitherto unpossessed by him of appointment, transfer, dismissal, and general control of officials of low grades in the provincial educational service.

CLASSIFICATION OF THE EDUCATIONAL SYSTEM.

The traditional and most convenient classification of the educational system of India is that into public and private institutions. Public institutions are those offering a course of study prescribed or recognized by the provincial department of public instruction or the provincial university and certified by competent authority to have attained the required standard. In point of management, public institutions are divided into those managed directly by the provincial government, or by local rural or municipal boards, and those managed by societies or individuals, aided by provincial or local subsidies, or supported by fees, endowments, or subscriptions. Private institutions are those financially independent of all aid, and excluded from the above categories. They are exclusively conducted by missionary activities of religious bodies. Following yet another line of cleavage from the above, the racial and lingual-racial, the classification is adopted of the vernacular, Anglo-vernacular, the English, and the Mohammedan.

Under the vernacular falls, of course, the great majority of the schools of India, the predominant feature being the vernacular primary school, which educates the native child from about 5 years of age, using the local vernacular dialect alone as the medium of instruction up to 10 or 11. The usual division is into two stages, the lower primary, of four years, and the upper primary, of one, two, or three years. The greater number of the pupils never advance beyond the lower primary, a fact which constitutes perhaps the most serious phase of the problem confronting the educational system of India; and the actual length of the average pupil's schooling is less than four years.

The next higher division is the middle school, which includes (*a*) the middle vernacular, really a continuation school giving instruction chiefly in practical subjects, without English, and leading to no higher standard, and (*b*) the middle English school, the beginning of the Anglo-vernacular division. This is the first school which

offers opportunity to a native child to pursue his education, and contains standards preparatory to the high school and articulating with it. The high school admits both natives and Europeans, and in most Provinces includes more than the American use of the term conveys, not only the essential high-school subjects, but also the middle standards just indicated, and even occasionally the last year or two of the upper primary.

Above the high schools are the colleges, which are (*a*) those of second or intermediate grade, corresponding in general to the American junior college of two years; and (*b*) those of the first grade conferring the B. A. or the B. Sc. within four years from the completion of the high school and the M. A. or M. Sc. within five or six years therefrom.

PRIMARY VERNACULAR SCHOOLS.

The primary vernacular school is the pivot of popular education in India. Except in a few districts, it is attended almost exclusively by boys. Instruction is sometimes continued through the middle vernacular classes, but the overwhelming majority of children never advance beyond the lower primary. In 1917 the primary schools and the primary departments annexed to other schools numbered somewhat over 140,000, with 6,748,101 pupils enrolled. This was an increase of 16 per cent over 1912, but registered an increase of only 2.8 per cent of the total population. Only 29,313,545 rupees are expended on them, a per capita of $4\frac{1}{3}$ rupees ($1.30). The low proportion of expenditure on elementary as compared with higher forms of education is the startling and significant feature of the entire situation, along with other facts reenforcing the well-known indictment of "topheaviness" against the entire system.

The evil naturally varies in intensity from Province to Province. Bombay and Bengal pay better teachers' salaries, and the expenditure upon primary schools in these two Provinces is less disproportionate than the average; but the evil of overcrowded and unequipped primary education is substantially as stated. Attempts have been been made, notably that in 1916–17 by the government of Bihar and Orissa, for the expansion of primary education by the district boards with the object of doubling the percentage of children enrolled in schools by opening additional schools and by a species of consolidation of schools. Another problem pressing for solution but for which none has been found is that presented by the fact that the school child of India abandons school within less than four years and between 10 and 12 years of age, and often relapses into complete illiteracy.

In the face of these problems changes, such as those in the curricula and methods of instruction, seem of minor consequence. Only in the western division of Bengal can a new curriculum be said to have been prepared. It was to be brought into force in 1918. The differences between the curricula for rural and for city schools are generally unrecognized. In some Provinces, in the attempt to keep boys in school longer, the directors have striven to give an agricultural tinge at least to education in rural schools by requiring the teachers to call attention to plant and animal life, to make reading and arithmetic questions concern themselves with agricultural methods and production, and to impart instruction in land records to advanced pupils.

The question of the medium of instruction has never been a troublesome one, primary education being almost always synonymous with vernacular education even in the primary standards attached to the secondary schools. The point at which instruction in English is begun varies from Province to Province, according as the lower primary has or has not infant standards and four or six standards besides; but practical uniformity exists in that the use of English as a medium of instruction (except in the case of east Bengal) always begins after the completion of the middle standards.

In Burma the largest educational increase recorded in India was shown, primary schools for boys increasing by 42 per cent and pupils in attendance upon them by 38 per cent for the five years up to June, 1917. A large part of this was due to the satisfactory settlement of the peculiar problem presented by primary education in this Province, namely, the assimilation of Buddhist monastic schools in the educational system, and the marked improvement of their teaching staff. These monastic schools are the most vigorous feature still left of the original educational system which prevailed before British occupation; and, forming as they do the principal means for the moral instruction of the youth, they can not be ignored. Indeed so influential were they locally that only by their maintenance and strengthening could the moral and political welfare of Burma be subserved. A satisfactory arrangement was made, the Government taking over the responsibility of financial support, appointing deputy inspectors, and in general bringing increasing numbers of these schools under the educational control of the Department of Public Instruction. The schools of Burma also must be credited with the only far-reaching change made in India during the five years under consideration. This was the introduction of a special course for boys who did not proceed beyond the fourth grade. No reports of the success of this experiment are available, but they are awaited with great interest by all students of Indian education

as dealing with a problem whose solution will be of inestimable value. During the year 1917–18 officials of Burmese education, with the consent of the Government, effected important changes in the curricula for Anglo-vernacular schools.

The chief effect of these changes was to prescribe a modified and uniform course in geography for these schools; to simplify the course in arithmetic for girls so as to leave more time for domestic economy and needlework, now compulsory; to separate hygiene from elementary science, making it compulsory for boys and girls in the primary and middle schools but optional in high schools, to amplify the courses in elementary science and object lessons, and to add morals and civics as a new subject in primary and middle schools. Arrangements were made for the preparation of a new series of textbooks in the above subjects as well as in geography.

To Burma also must be given the credit of effecting the most important administrative change of the five years, namely, the creation of a system of divisional boards to undertake, under the general control of the Educational Department, the administration of certain branches of vernacular education. The methods of handling of educational finances were also so simplified when these boards were created as to call to popular attention their increased responsibility for vernacular education. A conference held in 1916, participated in by representatives of native as well as British education, cordially accepted the arrangement, and divisional boards now have charge of all matters affecting vernacular education, subject only to the veto of the Department of Education.

With the stirring of ideas looking toward larger popular powers both in government and in education, and with the demands for compulsory education, intangible in most places and yet culminating in the Bengal act, there has been realized more thoroughly the inefficiency of the system of education as regards reaching the vast unlettered population of India. The demand for mass education, scarcely heard 10 years ago, has now so grown in volume as to fill the journals and public press, and to occupy a large part of the attention of provincial legislative assemblies. It has also significantly written itself on the mind of the governing Englishman, as is shown most conclusively by the Montagu-Chelmsford Report to Parliament, and on Indian soil proper by the circular letter addressed in 1917 to the local governments by the Imperial Government.

Grasping this demand in all its causes and implications, the educational officials of India do not hesitate to accept it as largely justified, and to use it as a powerful lever in their efforts toward thoroughgoing reform. In summarizing the general lines of progress made during the five years from 1912 to 1917, undeniable on the spiritual as well as the material sides, Dr. Sharp, educational commissioner of the Indian Empire, well sets forth what must continue to be the

weakness in primary education in India so long as the masses are unreached:

But it is impossible to rest content with an expansion of mass education on present lines or with a system under which a large proportion of the pupils are infants stagnating in a crêche, and the remainder glean only an acquaintance with the three R's, and only a small residue continue to the stage where some of the fruits of this initial labor can be reaped. Given sufficient funds and sufficient schools, education could probably be made universal on a compulsory or on a voluntary basis within a comparatively short time; but it would be an education which in many cases ended almost with the cradle and left 39 per cent of its recipients totally illiterate a few years after its cessation. This is the real crux of the problem. At the moment that a boy reaches a stage of reasonable intelligence he also becomes a useful economic asset, and even if he has not at once to begin labor in the field or factory, the utility of further study ceases to be apparent. To overcome this attitude we must look partly to better teaching, possibly to the addition of vocational classes, but mainly to the economic changes which are slowly permeating the country—agricultural progress, cooperative movements, and the growth of industries * * * . It is on economic progress that the future rests. We can not expect to see in India a literate and intelligent proletariat until that progress has permitted the provision of the necessary funds for more schools and more efficient schools and brought about the necessary change in the attitude of the people.

An interesting phase of primary education for native children is seen in that provided since 1916 by the Government for the children, and more especially the orphans of Indians serving the Empire in the Great War. Liberal grants have been made to the provincial school officials for aid to such children studying in the primary schools and also for the purpose of establishing new schools along modern lines in localities where needed. A striking feature is that all such provisions are applicable to girls as well as boys. Any child whose father is certified to have been slain or incapacitated in the service is entitled to free primary education with graduated allowance or to free scholarship in any middle school or to compete for scholarships in higher education. The Madras presidency led the way early in the war in exempting the children of actual combatants in the service from payment of all fees in the elementary schools. The amount presented by the women of India as a silver wedding gift to the Queen-Empress has at her request been devoted to the education of the children of fallen Indian soldiers. The Bombay presidency was the first to establish a technical school not only for adolescent children but also for disabled Indian soldiers for instruction in the trades.

A problem unique to India is the education of backward and depressed classes, such as the aboriginal, and hill and forest tribes, the classes subject to caste discrimination and neglect, the criminal tribes, and the communities, religious and racial, which present special problems. Naturally these classes vary so vastly from Province to

Province, and even within the same Province, in the causes underlying their condition and their needs, and in the methods to be used in their instruction, that no general rule can be laid down. The directors of public instruction are uniformly alive to the appeal made by these classes, educationally and socially, and a growing determination to minister adequately to them is manifest in the last reports of education in India. In this work the aid of the mission agencies has been invaluable. By years of patient toil they win the confidence of these classes, learn their tongue, found schools, and reduce to writing languages which have never been written.

Even more pathetic is the condition of the depressed classes, for they suffer more acutely from the immemorial tyranny of the caste system. As is evident, this question is complicated by many of the most subtly difficult phases of Indian social life. Here again Government schools must be supplemented by missionaries, both Christian and native; but throughout there must be taken into account the difficulty of securing as teachers natives of the better caste. Work among the criminal tribes, which only a generation ago were a terror in most of the Provinces of India, has been steadily pursued. An interesting fact is that the most successful agency for dealing with such tribes is the Salvation Army, which has established settlements remote from civilization and is imparting systematic industrial and moral training. Unequally applied, but of general use in the education of these classes, are such measures as special inspection under the auspices of the Government, scholarships and fee exemptions, a special system of hostels under moral control, instruction in industries and in weaving, carpentry, and silk culture.

The subject of the teachers upon whom primary vernacular education devolves is necessarily a most important one. The salaries, as all the directors freely admit, are inadequate, though what is deemed some improvement has taken place during the five years under consideration. In the representative Provinces of Madras, Bombay, Bengal, and the Punjab, the average salary is, respectively, 10,[1] 28, 7.5, and 12 rupees. In Burma it is the highest in the Empire, being 40 rupees per month. The dire necessity of supplementing salaries in various ways is a significant commentary upon the real situation. Teachers in many places are granted very precarious fees; again, they serve as branch postmasters, an arrangement long criticized, but still continued by the authorities; and in the more remote settlements they eke out their salaries by having charge of the cattle pounds, sanitation, and registration of cattle in the district. As the directors recognize in their reports, the raising of the standard of teachers and their place in the public estimation can only come from increase of salaries.

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[1] The rupee is estimated to be worth about 32 cents.

SECONDARY EDUCATION.

The division of secondary education into the vernacular and the Anglo-vernacular shows the extent of the departure from the uniform character of primary education. As regards the grading in this division, it includes the middle standard, whose exclusive purpose is to prepare boys for the high stage; and the high standard, leading directly to the colleges or technical school.

The middle standard is, except in the Central Provinces, entirely vernacular, though in most of the Provinces the study of English on the literary side is begun with the middle courses. A complicating element is also found in the fact that the middle standard usually has attached to it the upper primary classes. Indeed, this is the case everywhere except in Bombay and the Central Provinces. The middle vernacular schools constitute the type usually found in the rural districts; but there is increasing complaint that boys of talent and even high caste, whose only opportunity such a school is, upon its completion can not easily, if at all, be transferred to an English school.

In the few cases where such a transfer can be effected such a boy finds himself without the necessary training in English.

This problem has been clearly seen by most of the directors of public instruction. To take a representative Province, in Madras the attempt was made to draw a sharp distinction between secondary and elementary education. It was hoped that this would compel promising native boys to begin the study of English earlier in the vernacular school; but the attempt was found impractical, and the director reports that further means will have to be sought for properly grounding native boys who may be destined for a professional or public career, and for protecting the secondary schools from a large influx of ill-prepared boys from the elementary schools.

The high standard, which offers instruction ranging from one to three years, is conducted solely through the medium of English, and prepares directly for college and technical school. Its curriculum is modeled closely upon that of the classical public schools of England, such as Eton and Rugby. It naturally appeals almost exclusively to the boys of Europeans, and the few native Indian boys, destined to governmental employment, who have enjoyed unusual advantages of early training from tutors in English and classics.

The "top-heaviness" characteristic of the system of education in India is clearly illustrated in the secondary field. As this division is practically restricted to boys, the comparison must be instituted with the number of boys in the primary. This, in 1917, was 5,614,633, being 4.5 per cent of the total male population. In secondary education, the total enrollment for the same year was approximately

1,250,000, being 1 per cent of the total male population, and an even more striking increase of 28.3 per cent for the quinquennium under consideration. Here is met the most significant feature in Indian education, the numerical increase in secondary education. This varies from Province to Province, Bengal marking the highest percentage, having 35.8 of all the secondary schools, and 35 per cent of all the secondary pupils in India. But the phenomenon is marked in them all. If Bengal may be taken as representative, the director finds the following reasons for so extraordinary a popularity:

1. The partition of Bengal into two governmental districts with more effective administrative and financial handling.

2. The fostering of education by the Government, especially among the Mohammedans, a people traditionally inclined to education.

3. The prevailing high mark of prosperity, with the consequent ambition of the middle class to advance their children by means of secondary education into professional careers and governmental civil service.

With this phenomenal increase in secondary education, however, it was not to be expected that there should be a corresponding improvement in the extent to which it answers the needs of the native population, though in every Province earnest attempts have been made to make it do so. The provincial governments have everywhere recognized their responsibility to provide facilities at the larger centers, and have striven to relieve local bodies of the increased expenses of secondary education, to leave local funds free for use in elementary instruction, and above all to improve the salaries and living conditions of teachers. But after all has been done, it is still recognized that the crowding of ill-prepared native students into secondary schools, the inevitable corollary of the inertia of the primary schools remains an evil which disastrously affects the whole system.

In 1916, the Government of India submitted an exhaustive scheme for the approval of the several Provinces, whose main features were the reorganization of the service to which the graduates of high schools might aspire, the opening of additional high schools, the systematic financing of middle English schools by the Government, and a thorough overhauling of schedules and programs of studies. Another suggestion has been that the provincial government prescribe a maximum limit of, say, 40 pupils for high-school classes or sections; Madras and Bombay have already adopted such a limit, but the problem still remains unaffected by such palliative measures. It has been thought that the trouble lies with the impractical and too literary nature of the curricula; and therefore in the advanced

Provinces, such as Bombay and Madras, science, drawing, and manual arts have been made compulsory in many high schools, and others such as history and geography have been articulated with the life of the students.

In short, while the officials think that solid improvement has taken place in the spirit of secondary education and in the sincere desire for reform, yet the standard of secondary education is still discouragingly low because of inadequate staff and poor pay of teachers, overcrowding and defective discipline. As the educational commissioner reports:

> The apparently inexhaustible demand for secondary education, combined with the difficulty of meeting it in an adequate manner, tends to swamp the effects of reform. Existing schools are improved, but new ones spring up, lowering the average of attainment, and undermining discipline.

According to official reports of the year 1918, the general condition of secondary education throughout India at large had shown little improvement for several years preceding; but that year marked the introduction, in several Provinces, of important changes in the system of examinations in secondary schools. Details differ from Province to Province; but the common tendency has been to abolish the old blanket permit of college or university matriculation, and to stiffen up the examination or leaving certificate required by the individual secondary school. Examination upon a minimum of certain specified subjects is required. This move is interesting as running counter to the trend of modern secondary educational thought, which, certainly in the west, is setting ever more steadily toward easier articulation between the secondary school and the higher institution, and toward less emphasis upon examinations pure and simple. In India, however, it is only fair to point out the abuses which developed under the old system of easy matriculation, which was perhaps chiefly responsible for the swollen enrollment of the higher institutions with their masses of ill-prepared students.

A material feature of secondary education in India must not be passed over without notice. This is the institution of the so-called "hostel," by which is meant the boarding hall under the direct supervision of the school, with varying arrangements as to mess halls, and presided over by either the school head or one of the older assistants. As a large number of native boys do not live in close proximity to schools of secondary grade, and must attend such schools more or less distant, the importance of the hostel in their school life can not be overrated. The hostels naturally vary extremely in their character and in the habits of regularity, method, orderliness, and cleanliness which they inculcate. The negligent and even criminal conditions, with insanitary lodgings and exposure

to temptations, which have been discovered in many instances, have aroused directors and students of education to the duty of the State to see that so large a proportion of the school population shall live in a wholesome environment. Under compelling circumstances as they exist at present, it is recognized that the hostel system can not be done away with, but must be accepted, improved, and even extended. The Province of Madras in particular (where one boy in every five in secondary schools lives away from home) has grappled with the situation by a systematic study of the character and conditions of the hostels within its borders.

COLLEGES AND UNIVERSITIES.

The Indian colleges are divided into those which offer a general education and do not especially prepare candidates for any profession, and those which do prepare students for the professions. The former class fall usually under the head of colleges of arts and general science, themselves being subdivided into English and oriental colleges, with the latter of which we are not here concerned. The arts colleges, which train students by the medium of the English language in the usual subjects, are divided into first and second grade colleges. The latter, approaching in character and purposes the American junior college, do not confer a degree. The first-grade college graduates the students in all academic degrees and even offers a full graduate course.

While the colleges do not vary essentially in organization from Province to Province, they do vary decidedly in historical development, in number, in location, and in efficiency. Madras represents one extreme in the considerable number of scattered colleges, and of the second-grade and mission colleges; while Bombay and the Punjab represent the other extreme, that of the so-called "intensive development," grouping all eight of her colleges in three great centers. Following the English model, the colleges of all Provinces are closely affiliated to the universities, their courses and examinations, and even internal regulation and inspection, being prescribed directly by the universities. In certain Provinces, as in the case of Bengal, the university has power to annul the action of the college authorities in the matter of students' appeals from decisions and in the arrangement and conduct of hostels and mess rooms.

Among the pressing problems connected with the methods and the success of college instruction, the chief perhaps arises from the fact that the staff is usually ineffective in number for the great size of the classes under its charge. This complaint is voiced in most of the reports of the provincial directors. The situation is but another symptom of the "top-heaviness" already dwelt upon. In 1917 the colleges numbered 134, and showed an enrollment of 47,000

students, both native and European; registering a percentage of four-hundredths of one per cent of the total male population, and an increase of 60 per cent since 1912.

Within the past five years the question of the exclusive use of English as the medium of instruction in the colleges has come to the front, after having lain dormant since the early thirties, when Lord Macaulay's famous minute convinced the Government of India of the necessity of English as the only means of instruction. The Province of Bengal has led the way in declaring for bilingual instruction in the courses of its colleges, the other language being Bengali. This decision was arrived at after mature consideration of the claims of all languages spoken in the Province and the establishment of the fact that a considerably larger proportion of students use Bengali as their native tongue than any other. This decision, furthermore, does not affect the subject or content of courses offered nor relieve the student from satisfying the requirements in English literature and composition both at entrance and in course.

The tutorial system of studies, favored by most directors, under the direct influence of the English system, is profoundly and adversely affected by conditions varying with financial inability, with individual numbers of students, and with attainments of the tutors themselves. The tutorial system is most firmly established in the colleges of the Punjab; elsewhere it has at best a precarious footing.

As regards the conditions under which the students live, the hostel system which has been considered in secondary education plays also a large part in the colleges. Because of the maturity of college students as compared with those in the middle and high schools, the system is regarded as most successful in the colleges. The director of public instruction in Bengal thus summarizes the place of the hostel:

> Some parents whose sons could attend from home are said to prefer their residence in hostels because of the good influence which it exercises. Other means are used to promote corporate life and common interest. In Calcutta (where residential arrangements are defective) the colleges of the university acquired a fine building for social gatherings of students and their elders. In the well-managed colleges throughout India there is now an esprit de corps and a vigor of life which contrasts refreshingly with the languidly laborious existence which less favorably situated students still endure. Athletics, literary, debating, and scientific societies, and the production of magazines are usual features of college life, taking to some extent the place of general reading, which has not the same attraction for Indian as for English youths.

The five universities of India—those of Calcutta, Bombay, Madras, the Punjab, and Allahabad—were founded within the first 30 years of British rule, and until five years ago were considered as meeting all demands for the country. Their constitutions are modeled largely upon those of the English universities: They are governed by a

chancellor (the Viceroy or the governor of the Province), a vice chancellor, a senate diversely made up but along the lines laid down at Oxford and Cambridge, faculties and boards of studies, and finally a syndicate in whom are vested extraordinary powers of appeal and review. With the enormous increase in secondary education, the five years under review saw the awakening of a need for additional universities of various kinds. The Hindu university at Benares and the university at Patna opened their doors in October, 1917; the university of Mysore, under legislative incorporation of the Province, in July, 1917. The Indian university for women, a private institution, with scattered branches whose administrative center is at Poona, was founded in 1917.

The constitution and aims of the first mentioned are significant. It is frankly denominational, admitting persons of all classes, castes, and creeds, but imparting religious instruction in the Hindu tenets. It is sustained by large private and popular contributions, and begins on a more independent plane than any other hitherto known. The posts of chancellor and vice chancellor will be filled by the governing body. It is not—as are most of the other universities—an affiliating body controlling colleges scattered over a vast area, but its jurisdiction is limited to Benares and such colleges as may be established there. Important innovations are made in the constitution and functions of the several bodies which govern it, of which the main features are that administration is vested in a court composed of donors and persons chosen by various bodies, and that all academic control is vested in a senate consisting not necessarily of teachers in the university but of outsiders elected by the senate itself.

Of the schemes pending for the establishment of additional universities, most important is that for a university in Burma. This has grown steadily in popular interest during the five years under consideration, and plans are ripe for fruition within the next two years.

That a new conception of the purposes of higher educational training is permeating those in charge of Indian affairs is evident from the summary of college and university education in India given by Dr. Sharp, educational commissioner, in his seventh quinquennial review (1912–17):

Thus two lines of development are running side by side. The old universities continue mainly, as they were in the past affiliating institutions. * * * Meantime, new universities are springing into life—some, replicas of the old, but with smaller areas and with an endeavor at partial concentration around the university sight; others completely centralized and primarily teaching institutions. It is recognized that university problems in India are of a far-reaching nature, and that the best professional advice is requisite at the present juncture. * * * His excellency Lord Chelmsford, in addressing the recipients of degrees at Calcutta said: "Only the other day I asked a

law student why he was taking up law, with all its risks and disappointments. He answered, What else is there for me to take up? I am not going to discuss his answer, but this I will say, it is my sincere hope, and it is the policy of my Government, to endeavor by all means in our power to open up other avenues of employment. So long as students think that the only avenues of employment are in the legal and clerical professions, so long shall we get congestion and overcrowding in those professions, with consequent discouragement, disappointment, and discontent. Our policy then is first to secure that there shall be as many opportunities of a livelihood opened to the educated classes and next to endeavor to divert the students into channels other than those of law and Government clerical employ."

TECHNICAL, INDUSTRIAL, AND AGRICULTURAL EDUCATION.

The recognition of the vast economic and social value of practical lines of education in India has been seen in the Montagu-Chelmsford Report. It is also everywhere emphasized in the reports of the directors of public instruction for the several Provinces. A significant trend is also showing itself in the action of the local governments in depending more and more upon advisory committees whose duty it is to study the needs of the individual Province, peculiarly with reference to technical and industrial education, and to give expert advice both in management and in general policy. The adaptation of modern education to a country like India, for ages immovable in her social and educational ideas, is necessarily most complicated.

Perhaps the outstanding feature to be recorded of the five years under consideration is the work of a committee representing the Provinces at large upon the education of civil engineers. This committee considered carefully such questions as a low age limit for students entering engineering schools, requirements for admission to such, minimum knowledge of English necessary, articulation with Government colleges, in short all the problems confronting the development of an increasing body of native students of engineering.

It is agreed that only in the development of such a native body, both in engineering and allied lines of practical training, can means be found to stem the flow of young Hindus into the law and Government service.

The urgent need of industrial education began to make itself felt about 15 years ago, when a committee appointed by Lord Curzon suggested an apprentice system maintained by the State. In addition, the Imperial Government encouraged the establishment by the local governments of trade schools of various grades. The next 10 years saw many schemes, some fanciful, most too costly, and others still impracticable, put into operation. In Madras and Bengal especially the schemes for industrial education in weaving, dyeing,

mechanical engineering, and plumbing were most practical and fruitful. It is interesting to note that the scheme for the State training of apprentices was dropped, but led to the establishment of Government trade schools, where continuation classes are provided for youths still in the employ of various firms, an interesting anticipation of provisions in the Fisher Act. On the whole, however, industrial education in India has hitherto attained only a limited measure of success. The causes, racial and governmental, lie deep below the surface; but that the situation is capable of improvement and that it is improving is emphasized by the directors of the advanced Provinces.

The sign of greatest promise is the existence of the Indian Industrial Commission, with its encouragement of practical instruction in manual arts and domestic science in the common primary and elementary schools. The report of this commission, presented early in 1919, makes the radical recommendation that the general control of noncollegiate industrial and technical education should be transferred to the Department of Industries, though the cooperation of the Education Department can not be dispensed with. The commission feels that an education purporting to train for industrial life must have direct organic connection with industries and industrial employers; that teachers and inspectors should be trained by the Industries Department not merely for independent schools but also for industrial and technical apprentice classes annexed to commercial plants.

The Government of India has never lost sight of the supreme importance of agricultural education in India. This is one subject that is free from complications, inasmuch as its two fundamental objects—the improvement of agricultural methods and the betterment of the material and economic conditions of the vast mass of the people of India—confront all students of the subject on the threshold.

To devise ways to reach influential classes, such as the landed and more prosperous cultivating class, a number of conferences participated in by students of general education as well as of agriculture have been held. Chief of these was that held in Simla in June, 1917, at which were represented all the Provinces of the Empire. It recommended the foundation of agricultural middle schools, the specific training of teachers for such schools, the adaptation of primary education to rural needs, the establishment of an agricultural college in each of the principal Provinces of India, and the more general diffusion of agricultural knowledge among the mass of the people by the demonstration of improved methods and by instruction brought to the illiterate tiller of the soil.

Most of the agricultural colleges in existence report a grave lack of interest among the people, as evinced by the small number of

students generally attending and by the even more serious lack of demand for specially trained men on the part of the landholders and agents of large tracts. Attempts have been made to increase interest in individual colleges by reducing the length of course and by offering practical courses rather than those upon scientific subjects. Most of the so-called agricultural colleges, according to reports, are very little more than secondary schools.

THE EDUCATION OF GIRLS.

With the stirring of reform movements in Government, and the proposal to extend suffrage to women, the education of women in India has become within the five years under consideration a burning question, such as was never anticipated it would be. Speaking generally, little provision is made in the governmental schools of India, vernacular or Anglo-vernacular, for the education of girls. They are educated mainly in special schools, which are generally private except in districts where, as in the Central Provinces, the Government has taken over control. Only in Burma, where extremely early marriage does not prevail, are the schools mixed.

The subject is, like so many others, complicated by innumerable traditions and social limitations. According to the inspectresses of various districts, difficulty is experienced in securing Indian ladies of position to work upon local committees, in attracting women of proper character, attainments, and caste to work as teachers, in securing regular attendance, in inducing girls to remain in school for a reasonable length of time, and back of all in combating and overcoming the age-old hostility to educating women at all. Despite these social as well as educational difficulties, however, the great increase of 29.2 per cent is to be recorded for the past five years in the total number of native girls under instruction in India. This for 1916–17 reached the surprising total of nearly 1,300,000 girls. More important than the increase in numbers is the change which is being wrought in the attitude of the public, a change which applies not only to the essentials of primary education, but also to secondary schools. Authorities agree that:

> Indian public opinion has slowly changed from its former attitude of positive dislike to the education of women and is now much more favorable as regards every community. * * * Professional men now wish to marry their sons to educated girls who can be in a real sense companions and helpmates; therefore education is beginning to be valued by parents as improving the marriage prospects of their daughters.

A large part of the credit for the advance of female education is due to the fact that the quality of teaching in schools for girls is better than in those for boys. This is especially pronounced in sec-

ondary schools, both those under mission management and those, as in the Central Provinces, maintained by the Government. Again, modern courses in industrial and vocational subjects have been introduced in many girls' schools, and increased attention has been paid to physical training. Here immediate results of modern diet and training have been most pronounced.

Another interesting phase of women's education well shows how closely related are social and educational considerations in India. The institution of extremely early marriage, and its concomitant of a large number of child widows in the great Brahman States of Madras, Bombay, and Bengal. have led school authorities to take measures for the education of that element of the population which has hitherto been neglected and led a sad and useless life. For the most part such Brahman child widows are distinctly intelligent and their training as teachers, especially for secondary schools, has been attended with marked success. The school authorities see in this a powerful incentive toward the popularizing of secondary education amongst the Hindu people.

A word should be said as to the encroachment of English education for girls upon the vernacular education. From all reports, the appreciation of English education is growing, largely because in the public mind English influences are held responsible for the existence of any education for women at all. Some authorities see the future of girls' education as lying in a judicious extension of the middle English schools, whose graduates should furnish a nucleus of educated opinion as well as a trained corps of teachers. The director of public instruction for Bengal vigorously summarizes the situation :

> We may at least hope that in dealing with the education of girls, we shall not repeat the mistakes which have been made in the education of boys. There will be no excuse if we do, for the girls of Bengal with comparatively few exceptions do not have to be trained to scramble in the open market for a living * * * For many years yet secondary and higher education will be confined to the few. Is it too much to hope that we shall be able so to order things that the education given will be a reality? There is only one way of accomplishing this, and that is by securing cultured and sympathetic women to work as inspectresses and in colleges and schools and by giving these women as free a hand a possible. If we determine to do this and do not shrink from the bill—it will not be an unlimited liability—we shall be giving Indian women a chance.

EDUCATION OF MOHAMMEDANS.

The discussion of Indian education, as has been seen, centers, predominantly around that of the native population. Up to this point general lines have been laid down which include all races and creeds without discrimination. But there is an element of the native population so distinct and so tenacious of creed and customs that special

mention must be made of it. This is the Mohammedan population of British India, which comprises (1917) 58,000,000 souls, or slightly less than one-fourth of the total. It is the only racial group whose adjustment to the uniform educational system of the country once seemed fraught with grave difficulties. But time has brought tact and understanding to the authorities in their dealings with the Mohamedans. Racial and religious barriers have been so broken down that in the Provinces showing the highest Mohamedan population—Bengal, the Punjab, the Northwest Frontier Province, and in some of the native administrations under British protection—the Mohammedans had proportionately a larger number of children in the lowest vernacular schools recognized by the Government than any other race.

But there are certain difficulties still inherent in the situation. The Mohammedan religious authorities require the child to attend the Mosque before he does any other. This results in the Mohammedan boy's commencing his regular schooling at a later age than the average. The alien languages to be learned, and the poverty of large sections of Mohammedan communities (where many converts are from the depressed classes) have worked to reduce the numbers in the higher standards of the primary vernacular schools materially, to say nothing of those in the institutions of higher education.

A further important element in the situation is the small number of Mohammedans engaged as teachers in the Government system. This is, among others, a result of the strict religious obligations laid by purely Mohammedan education upon its graduates to remain faithful to Islamic teachings. Thus conditions for both teachers and pupils of Mohammedan faith are not favorable to the development of confidence in the Government schools. In Bengal the authorities have steadily endeavored to develop such confidence by special concessions to Mohammedans and the assignment of a large proportion of official posts to be filled by them.

None of the measures indicated, however, has been recognized as adequately meeting the situation, and the authorities have repeatedly authorized the Mohammedans to start their own schools under their own committees, with full facilities for religious instruction and observance. Such schools are: (1) Those which teach the ordinary course of elementary subjects; (2) those which started as native schools but have modified the prescribed curriculum; and (3) those which are indifferent to government recognition and have their own scheme of studies. The number of Mohammedan schools necessarily varies widely from Province to Province, secondary schools being specially well developed among them. In Bengal especially there is the unique combination of what are really middle

English schools with separate departments using Arabic as a medium of instruction and teaching Arabic literature.

Three colleges are maintained by the Mohammedans, which mark a distinct advance in the reconciliation of the turbulent quarrels of the frontier tribes, many students being drawn from the non-Mohammedan population. There is an increasing demand for college education among the Mohammedans in Bengal, and the next few years bid fair to see additional colleges initiated to meet this demand.

To sum up the situation: The English educational officials are much encouraged by the marked increase in the number of Mohammedans resorting to the schools giving instruction along modern lines. Indeed, the number of Mohammedan pupils has steadily grown to be larger in proportion to the number of this group than those of all races and creeds together. The increase of Mohammedan pupils in the Government schools is a convincing proof that even among this stubborn group—

> the old prejudice against modern forms of thought and exclusive adherence to the orthodox subjects are dying away. Views are broadening. It is seen that instruction in special schools is often inferior—if only because the staff is inferior. * * * The special school that teaches unnecessary or useless subjects is waning in popularity. The cry is still for special institutions, but of the type that will fit the Musselman for the developments of modern life while yet keeping him a Musselman.

EDUCATION OF EUROPEANS IN INDIA.

While the study of Indian education primarily concerns itself with instruction imparted to native children, who comprise the overwhelming majority of all school children throughout the Indian Empire, yet the education of the children and youth of European descent should not be overlooked. In the nature of things a different background of tradition and inheritance is possessed by the European, and his children, no matter how humble or to what employment destined, have essentially another outlook on life from that of the native, and in most instances children of European descent, whether pure or mixed, retain European habits and modes of life. As late as the close of the past century social distinction brought about the result that children of English officials were sent to England in early infancy, there to be educated, or in the more healthful hill Provinces special schools were privately organized and maintained for them. At the same time the children of the poorer Europeans and those of mixed blood were left to be educated largely by charity and in schools especially founded by private and religious benefactions.

Of recent years not only has the European population of the leading Provinces of India increased exceedingly with the development of commerce and industries, but it has come to be recognized as the moral duty of an enlightened State to assume the instruction of all children whose domestic circumstances can not afford them adequate schooling. The original character of the schools for European children has, however, remained, and even where governmental grants are assigned it is usually to schools founded and managed on religious and denominational lines. In return for the grant of aid the Government does not always require a share in the management. The case of Bengal may be taken as representative. Out of 79 institutions for the training of European children only 5 are managed by the Government; 15 are undenominational, most of them being schools maintained by the industrial corporations for the children of their employees; the remainder, 59, belong to various religious bodies. This denominational character, although the powerful factor in the existence of such schools, has come to be regarded as leading to some waste of effort, and the Government has begun to encourage the consolidation of such schools wherever local conditions make it possible. Such schools are visited by a special inspector in each of the larger Provinces, but beyond good sanitary and health conditions no very rigid requirements are exacted.

In Provinces and districts where denominational and private schools have not been founded the Government has addressed itself seriously to the long-neglected question of the education of Europeans. Since the historic conference on this branch of education held at Simla in 1912, presided over by the governor of the Punjab, and including representatives of the various interests of European life in India, interest has steadily grown. The system of compulsory education, of which the conference declared itself in favor, met surprising opposition from the local governments, the claim being made that the voluntary system of attendance was found to be working effectively. This, however, has been questioned by social workers in the large cities. Especially in the city of Madras the imperial grant of 30,000 rupees for the extension of education among the poorer classes was gratefully welcomed in consideration of the undeniably large number of European children not reached.

Separate European education naturally enrolls the overwhelming majority of its pupils in the primary stages. Embracing the middle school, 9, 10, and, in a few instances, 11 grades are offered, the subjects being practically the same as those taught in corresponding European schools. An interesting feature is that the second language required may be either Latin or a modern European language or an Indian vernacular. In regard to high-school work, the conference above referred to recommended for the high schools for boys a more

modern and practical curriculum with a few schools which should prepare boys for the universities and the professions and be called collegiate schools. The latter clause, however, owing to the disagreement of local governments and the Imperial Government of India, which thought the need amply met by practical training, was not put into execution.[1] As a matter of fact the peculiar defect of European governmental education in India is that it makes scant provision for continuing the education of promising boys. A few endeavor to go to England, and those unable to do this are admitted to the colleges for Indians, where they enjoy all advantages. Most of the directors report satisfactory progress in the European schools in their Provinces, and interest in this field is shown by the proposal for a training college for teachers in southern India. Methods and instruction are reported as still improving, in spite of the losses of many teachers to military service.

TRAINING OF TEACHERS.

The broad distinction between the English and the vernacular schools is also carried out in the classification of teachers. Teachers trained in the English schools serve in secondary schools exclusively; teachers trained in the vernacular institutions serve almost exclusively in primary schools but to some extent also in secondary schools. The former class are trained according to English methods in the 15 special colleges and call for no further notice. The latter are of great importance in the system of Indian education, but their training lacks much of being what it should be. The Government of India has always been alive to the necessity of having a supply of teachers for primary schools adequate both in number and in attainments; but progress has been hampered in the many ways already shown in the treatment of primary education.

In August, 1916, the Government of India issued a circular letter to local governments pointing out the inadequacy of the arrangements in many Provinces for the training of teachers for secondary and primary schools, and suggesting as a minimum standard that the number of teachers to be trained in each year should not be less than the number of new teachers who must be provided to take the place of those who have died or resigned or to meet the demands created by the extension of education. Since then considerable improvements have been effected, but no improvement can be funda-

[1] It is interesting to record that this problem was attempted in Madras, where a very progressive schedule of studies, allowing three alternative courses, has been introduced in the middle schools. The first was for pupils who did not intend to pursue their education; the second prepared for the high school with studies leading to college and university; and the third prepared for business. Madras also has the credit of being the first to provide especial vocational and domestic economy training, an example which has since been followed by some of the schools in Bombay.

mental unless the teacher's profession is so elevated socially and financially as to attract an adequate number of candidates of the proper stamp. This has been attempted by increasing salaries, the effect of which has been to increase the numbers of the applicants in many Provinces, if not to elevate the quality. Of the approximately 190,000 teachers of the vernacular, barely 60,000 are trained.

The magnitude of the problem is serious. If the wastage of teachers of the vernacular be estimated at 6 per cent each year, the training institutions should turn out 12,000 teachers a year. But in 1917 the number turned out was only a little below 9,000. Thus the normal supply is not maintained, to say nothing of the increase necessary for extension.

Students enrolled in the higher vernacular training institutions are required to have completed the middle course in the vernacular or Anglo-vernacular schools, and upon graduation they are certificated to be teachers in secondary vernacular schools or to be headmasters of primary schools. These are the distinctive normal schools, their training extending over periods of from one to three years according to the Province concerned. Schools of a lower type are attended by students who have completed only the upper primary grades, and they offer shorter courses for the training of ordinary teachers in primary schools.

It is the improvement in the students frequenting this latter class of schools that is the task of supreme importance in the training of teachers. The several Provinces differ in the attention bestowed upon the one or the other of the two lines of teacher training, and in the content and thoroughness of the courses offered. The problem of improvement has been most seriously attacked in the Province of Madras, where, as the report shows, modern methods are much needed:

As regards the methods followed in the training schools, criticism and model lessons are generally suitably conducted. A weaker point in the training is the work in the practicing section. With the existing numbers it is difficult to give the students sufficient practical work, nor does it appear to be sufficiently recognized that the practical work done must be thoroughly supervised, scrutinized, and discussed with the students. The teaching of the subjects of general education is variously reported upon. With their better staffs, the Government schools are better than the aided. Nature study seems to be the weakest subject and garden work poor. * * * Criticisms are also heard of the teaching of geography and the vernacular. On the whole, however, real progress appears to have been made.

GENERAL CONCLUSION.

In conclusion, the note of encouragement and optimism voiced in the reports of the several directors of public instruction seems justified, and a net result of progress during the quinquennium is to be

recorded despite the retrogression in certain districts and in certain branches of education which are inseparable from the economic and other effects of the war. As Dr. Sharp summarizes the situation in his concluding paragraph upon the general progress of education in India:

There is no denying the fact that while public interest in education has increased, public opinion so far as it is expressed often remains crude and unformed. Press utterances are frequently actuated by vested interests or political motives. The criticism of measures of reform is attractive and the student community is a valuable political asset. * * * There is a tendency to lower standards and to oppose their improvement. Publicists support pupils in acts of indiscipline, openly blaming the teachers and deprecating punishment. * * * Below these manifestations there is a great body of sound public opinion. Nor is it always inarticulate. An important section of the press has, during the quinquennium, approached educational questions in the spirit of the educator. This is a hopeful sign. But before a thoroughly sound advance can be made it is essential that educational questions should be regarded on their own merits, that the teacher should come into his own and that due values should be set upon the respective merits of knowledge and of understanding.

EDUCATION IN EGYPT.[1]

Egypt was declared a British protectorate on December 18, 1914. The ruler under the title of sultan, formerly khedive, and the Council of Ministers form the government. The authority of Great Britain is vested in the British Resident, the British advisers of each ministry, and inspectors of the various departments in the 14 Provinces. Education is controlled by the Ministry of Education or the central authority and the councils, or the local authority for education. No close cooperation exists between these two kinds of bodies. The majority of the population is illiterate. According to the 1907 census, 96 per cent were unable to read and write. At present only 3 per cent of the population are attending elementary schools. A scheme is, however, under way which aims to establish efficient schools for at least 10 per cent of the population within the next 30 years. The net expenditure of the Egyptian Government on education represents less than 2 per cent of the annual budget. This sum is intended primarily to cover the expenses of the Europeanized course of education designed to fit Egyptians for various branches of the public service and for professional careers. The education of the masses is intrusted to provincial councils or the local authorities, who make provision for elementary schools in their areas.

BUDGET.

The expenditure of the Ministry of Education for 1918–19 amounts to $2,858,941, which is an increase of $548,216 over the esti-

[1] Based upon the note of the Ministry of Education on educational organization and policy.

mates of the preceding year, when the credits granted were lower by $186,727 than the prewar level of 1914–15.

Education of Egypt is now clearly crystalizing into two systems: The Europeanized, which aims at providing education chiefly for the wealthier circles of society, and the vernacular, which aims at providing a practical education for the rest of the population. The Europeanized system is modern. The vernacular is old and indigenous. The primary schools form the basis of the Europeanized system.

INFANT CLASSES AND SCHOOLS.

Infant classes are at present provided in girls' primary schools only. As some knowledge of reading is required for entrance to primary schools, the ministry is making provision for the establishment of two infant schools for boys, one in Cairo and one in Alexandria.

PRIMARY SCHOOLS.

The Ministry of Education at present maintains 30 boys' primary schools, attended by 6,716 pupils. The provincial councils maintain 27 boys' primary schools, attended by 2,892 pupils, and give grants in aid to 14 private primary schools attended by 1,985 pupils. There are also 42 other private boys' primary schools, attended by 7,999 boy pupils, under the inspection of the Ministry of Education.

The girls' primary education is provided at present in three Government primary girls' schools, attended by 491 pupils. The provincial councils maintain 10 primary schools attended by 993, and give grants in aid to two other schools with an attendance of 227. There are also under the inspection of the ministry 15 private girls' schools, attended by 1,726 pupils. The Ministry of Education has thus under its control or under inspection 113 boys' primary schools attended by 19, 592 pupils and 30 girls' primary schools, attended by 3,437 pupils.

The staff in the primary schools is exclusively Egyptian, and all the instruction is given in Arabic. The curriculum comprises the ordinary elementary subjects. English is also taught. In girls' schools stress is laid on training in domestic subjects (cooking, laundry, housewifery, and home hygiene). The course in boys' schools lasts four years; in girls' schools six, the first two years constituting infant classes.

The instruction in the Government primary schools is not free, but some provision is made for necessitous children in the primary schools belonging to the provincial councils and private benevolent societies.

The primary education certificate, formerly awarded upon the completion of the primary school, qualified the pupils for appointment in the Government service. This attracted a large number of

pupils who did not intend to pursue higher studies and were thus diverted from taking up a more practical course of studies. This defect was remedied in 1915 when the primary education certificate was abolished. In its stead was instituted an entrance examination for admission to secondary schools. By this reform the primary course lost its mark of self-completeness and came to be regarded as an initial stage of the Europeanized system.

THE VERNACULAR ELEMENTARY SCHOOLS.

The vernacular elementary schools, called maktabs, aim to meet the needs of the population at large. The course lasts four years, and, in addition to the ordinary elementary subjects, includes the study of the Koran and the tenets of Islam. In girls' schools stress is laid on domestic science. The standard in maktab schools is far below that maintained in the primary schools. Improvements are being introduced gradually. In the Government and in a number of other maktabs, teachers are paid fixed salaries instead of being dependent on school fees. In some places, as for instance in Alexandria, private maktabs are being bought out by a special commission and turned into municipal schools under the inspection of the ministry. At present the ministry maintains from its own budget two maktabs with 209 pupils and manages or inspects 4,263 maktabs attended by 282,063 pupils.

HIGHER ELEMENTARY SCHOOLS.

These schools aim to supplement the meager education received in the maktab schools. There are at present 16 higher elementary schools attended by 742 boys and 226 girls. These schools are supported by the Ministry of Education and the provincial council. The boys' higher elementary schools are of two types, urban and rural, with a four years' course each. The rural schools offer, in addition to the usual literary subjects, lessons in rural science and native study, mensuration and surveying, and practical work in the school garden, as well as a certain amount of manual training. The urban schools have an industrial bias. The school schedule provides among other subjects for lessons on materials, machines, and manufactures, as well as for a large amount of manual training. These schools represent a new development in Egypt. The manual training is intended to be a means of mental training. The pupils, it is claimed, show great delight in manual work, and this reacts favorably on their book work. In order to facilitate the development of this new type of schools the fees have been considerably reduced. In the girls' higher elementary schools the course is limited to three years. The instruction is practical, more than one-third of the time being devoted to domestic training (needlework, cookery, laundry work, housewifery, household accounts, and home hygiene).

SECONDARY SCHOOLS.

Secondary schools are the product of the Europeanized system. The ministry maintains at present six secondary schools and arrangements are being made to open a seventh. The schools are attended by 2,442 pupils. There are also 28 private secondary schools, attended by 4,643 pupils. In 1913 the ministry inaugurated a system of grants in aid to private secondary schools. This had a marked effect in improving the equipment and efficiency of these schools. The ministry has thus under its control or under inspection 34 secondary schools, attended by 7,085 pupils. There are at present no departmental secondary schools for girls, although the ministry is planning to create a girls' high school for the children of the well-to-do classes. The secondary course for boys extends over four years, branching out at the end of the second year into two divisions, literary and scientific. The syllabus for the first two years comprises Arabic, English, history and geography, mathmematics, elementary physics and drawing, as well as physical training. In the third and fourth years, while the teaching of Arabic and English is continued, pupils in the literary course begin the study of French and follow an extended course in history and geography, while pupils in the scientific course do not take up the study of a second foreign language but devote their time to extra work in mathematics, science, and drawing. The secondary examination is taken in two stages, Part I after the second year and Part II on the completion of the course.

INTERMEDIATE TECHNICAL SCHOOLS.

Admission to the intermediate technical schools is based on the primary course of study. The technical schools comprise the Bulak Technical School, the Intermediate School of Commerce, both in Cairo, and the Intermediate School of Agriculture at Mushtohor. The Bulak school has a four years' course of study, the school of commerce and that of agriculture only three years. The Bulak Technical School is organized in three sections—building construction, mechanical and electrical, and arts and crafts. The first two schools are under the department of technical education (a branch of the Ministry of Education); the last is under the Ministry of Agriculture.

The Ministry of Education also maintains model workshops at Bulak, Mansura, and Assiut, which are attended by 743 pupils. In addition, the provincial councils maintain 12 trades schools, attended by 1,643 boys. There are also five trades schools, attended by 531 boys and 156 girls, in the governorates. These nondepartmental trades schools receive grants in aid from the department of technical education. The Ministry of Education also maintains one

domestic school and inspects two private schools. Agricultural education is provided at nine agricultural schools, attended by 473 boys. These schools receive grants in aid from the Ministry of Agriculture, which is responsible for the inspection of the schools.

ELEMENTARY TRAINING COLLEGES FOR MEN AND WOMEN.

Great progress has been made in recent years in the training of teachers, both men and women, for service in the maktabs. It was only in 1903 that the first elementary training college was established. At present, in addition to the two men's training colleges and two women's training colleges maintained by the Ministry of Education, there are in existence 13 training colleges for men and 10 for women teachers, supported by the provincial councils. The four Government colleges are attended by 196 men and 396 women. No fees are charged, and in two women's colleges the students are lodged and boarded free. The 23 provincial council colleges are attended by 1,059 men and 353 women. The Ministry of Education has thus under its control or inspection 27 elementary training colleges, attended by 1,255 men and 749 women.

The elementary training college course extends over three years. The men's colleges are at present recruited mainly direct from the maktabs, but also largely from the mosque schools; the women's colleges are recruited direct from the maktabs. At present evening classes are held in the Bulak Elementary Training College for teachers in maktabs in order to improve their competence in kindergarten methods and physical training. As the existing higher women's college does not furnish a sufficient supply of teachers for the women's elementary training colleges and for the girls' higher elementary schools, the ministry has found it necessary to provide some other source of supply. In 1917 it created a supplementary course in the Bulak Elementary Training College, 11 students remaining to be trained as teachers of general subjects and 6 as domestic science teachers. The experiment having proved satisfactory, the ministry has now developed the scheme by extending the course to a second year. A third section was added for the training of kindergarten teachers for the new infant schools and the infant classes in the girls' primary schools.

NASRIA TRAINING COLLEGE AND SCHOOL FOR CADIS.

Apart from the University of Al Azhar and the other mosque schools, the Nasria Training College and the school for Cadis form the culmination of the vernacular system.

The standard of admission to the Nasria Training College is very low. The college has now 318 students, all of whom receive their training free. The course extends over five years. Its special

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purpose is to train sheiks as teachers of Arabic, the Koran, and tenets of Islam for service in the primary and secondary schools.

The school for Cadis, which is under the Ministry of Justice, comprises two sections, a lower section for training clerks and a higher section for training judges, both for service in the Moslem courts. The lower course occupies four years and the higher course five years. In addition to free education, the students receive a bursary.

HIGHER COLLEGES.

The higher colleges, based on the Europeanized system, include the School of Medicine, the School of Pharmacy, the School of Engineering, and the Sultania Training College under the Ministry of Education; the School of Law, under the Ministry of Justice; and the School of Agriculture and the Veterinary School, under the Ministry of Agriculture.

The principal facts with reference to the various higher colleges are shown in the following table:

Courses and students in the higher colleges.

Higher colleges.	Length of course.	Number of students.	Higher colleges	Length of course	Number of students
School of Law	4	288	School of Agriculture (Giza)	4	120
Sultania Training College	3	273	School of Commerce	3	75
School of Engineering	4	239	Veterinary School	4	31
School of Medicine	5	237	School of Pharmacy	3	20

Admission to the higher colleges is based upon the secondary education certificate examination. For the School of Medicine and the School of Engineering the scientific secondary certificate is required, for the School of Law the literary certificate; the other colleges admit students irrespective of whether the certificate is obtained on the scientific or literary side, though in the School of Agriculture and the Veterinary School preference is given to applicants possessing the scientific certificate. English is, in the main, the medium of instruction in the higher colleges.

In the Sultania Training College there are two sections, a literary, recruited from students with the literary certificate, for the training of teachers of history, geography, translation, etc.; and a scientific, admitting students with the scientific certificate, for the training of teachers of mathematics and science. These colleges admit boys only.

THE SANIA TRAINING COLLEGE FOR GIRLS.

This college forms an important phase in the development of female education in Egypt. It is this college that is to supply women teachers not only for the girls' primary schools but also for the

women's elementary training colleges and the girls' higher elementary schools. The regulations provide for a four years' course. The Sania Training College at present contains 91 students, as compared with 77 in 1917 and 4 in 1900, when the college was founded. All the students are boarders, and no fees are charged. The standard of admission is low, but this will be remedied when a girls' high school, which the ministry intends to open, comes into existence.

A number of graduates of the higher colleges are sent to Europe for further studies. At present the Ministry of Education maintains 33 such students, all of whom study in England.

EDUCATION OF JEWS IN PALESTINE.

By Theresa Bach,

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GENERAL DEVELOPMENT.

The recent revival of Hebrew education in Palestine culminated in the laying of the corner stone of the future Hebrew University in Jerusalem. It was the outgrowth of the Jewish national movement known under the name of Zionism. During the past few decades, and particularly during the years immediately preceding the war, a great revival of the Jewish spirit took place among the Jews in all the countries of the world. This is true particularly of Palestine, where the Jewish life began to shape itself along national lines. The Hebrew language was revived and became a living tongue. Hebrew literature sprang up, aspiring to take a place among the great literatures of the world. Hebrew writings were translated into modern languages. The masterpieces of English literature were rendered into Hebrew. Hebrew songs, newspapers, and textbooks were current. School children were instructed in Hebrew, despite the endeavors of the Young Turks to make Turkish the principal language of the country, and in active opposition to the propaganda carried on by the German, French, and English schools established in the Holy Land. Notable among the foreign institutions were the schools of the Alliance Israélite and the Hilfsverein der Deutschen Juden, a French and a German organization, respectively. The former employed French as a language of instruction; the latter, German. Neither of these bodies had, however, sufficient comprehension of the new life that was budding in Palestine. The policy pursued by the men in charge of foreign schools made it easy for the truly nationalistic schools to gain ground and supersede the older institutions. No foreign rivalry could crush the efforts of those who regarded Hebrew as the language of their own and strove to develop it in the land of its origin.

December 10, 1913, marks a new era in Hebrew education. That was the day when not only the language question but the whole policy of Jewish education in Palestine was definitely settled. The immediate cause of this turn of affaris was the decision of the German Hilfsverein with regard to the language of instruction in schools supported by that body. Contrary to its previous policy, the Hilfsverein began to neglect the study of Hebrew and pushed it more and more to the background. This caused much discontent among teachers and pupils nationalistically inclined. The climax was reached in December, 1913, when the Verein passed a resolution to the effect that the language of instruction in the new Technicum at Haifa, then under construction, should be German. A general walkout in all the schools of the Verein followed, with the result that the best forces in the teaching staff went over to the Hebrew schools and helped in spreading the ancient culture of their own. The attitude of the pupils was no less remarkable. Over 50 per cent of the total number joined the national schools, where instruction was given in their own tongue. An immediate consequence of the Hilfsverein's action was the creation of the educational committee, which sprang up in time of struggle. The aim of this committee was to establish order and cope with the situation created by the split. Its efforts were directed toward building up a school system truly representative of the best wishes of the people. New elementary schools were opened and conducted along modern lines in all the towns of Palestine. In Jerusalem, Jaffa, and Haifa, national schools replaced the old institutions maintained by private philanthropy, which were forced to close their doors. These new schools grew rapidly and attracted large sections of the population who had held aloof from the semi-Hebrew schools of the Hilfsverein.

In agricultural colonies conditions differed. The colony schools, though subsidized from abroad, were not maintained by foreign organizations. They came into existence with the colonies themselves and reflected the spirit that animated the settlers. At the outset of the war elementary schools existed in each of the 30 colonies of Palestine. The language of instruction in all these schools is Hebrew. The program of the colony schools comprises the usual elementary school subjects, in addition to lessons in religion, Bible, and Jewish history. Arabic is also taught, as knowledge of this language is indispensable in Palestine. In some of the colonies instruction in French is given. This is due to the fact that many of the colonies were for some time under the control of the Jewish Colonization Association, a French institution which subsidized the schools. Fortunately, the subsidy carried with it no interference in the internal management of the schools. This was left entirely

to the colonists. The colony schools sprang up independently of one another and differed widely in method and character. Some had only elementary classes, others with a larger school population had a well-equipped elementary school, with eight classes and a kindergarten attached to it. Of recent years the teachers' association, which performs the function of a board of education, set a certain standard for these schools. This body appoints teachers for the colony schools and furthers educational development by publishing Hebrew textbooks and a Hebrew educational periodical, Ha-Chinnuch. It is noteworthy that all national Hebrew schools have been organized and conducted by a local committee of parents and teachers. This committee drafts the program of the school, subject to the approval of the Hebrew Teachers' Association. Schools of the elementary type are the only schools in agricultural colonies. The colonies, though growing rapidly, were not large enough to provide for secondary instruction. This was introduced in the two large cities, Jaffa and Jerusalem. Though not directly founded by the Zionist organization, the secondary schools are the product of the Zionist spirit.

SECONDARY EDUCATION.

The gymnasium in Jaffa, as the secondary school is called, has four preparatory and eight regular classes. After the fifth year the curriculum branches off into the classical and the so-called "real" course. The program of the gymnasium includes, in addition to the ordinary high-school program, the study of the Bible, the Talmud, Turkish, and Arabic. Emphasis is laid on gymnastics and the excursions which form an important item in all the national schools. The rapid development of the Hebrew high school in Jaffa is graphically described by Dr. Mossinsohn, one of its leaders and inspirers, in the Menorah Journal, December, 1918. Opened in 1906 with 17 pupils and 4 teachers, it grew so rapidly that in the latter part of 1914 it enrolled 900 pupils and 30 teachers. The curriculum is given in Hebrew exclusively, and the diplomas of the school are recognized by most of the American and foreign universities. In the last few years the popularity of the school was so great that it was almost entirely sustained by the income derived from tuition. The gymnasium in Jerusalem, organized in 1908 and patterned after that in Jaffa, had a somewhat slower development. Both high schools are coeducational. Important from the point of view of a national system of education was the establishment of a school for kindergartners with a three-year course in Jerusalem and a technical high school at Haifa. Both were opened in 1914 by the educational committee, as a result of the controversy with the Hilfsverein. The Haifa school was opened in place of

the proposed Technicum. It is coeducational and aims to give students a technical training. The original idea of building a higher technical institution in Palestine has not been abandoned. Those interested in the project hope to realize it as soon as an opportune moment presents itself. There are, of course, in Palestine a number of Jewish schools with a decidedly religious bias. These schools are orthodox in spirit and hostile to modern innovations. Their chief aim is to foster the Jewish religion and to keep it intact from foreign influences.

Of special schools the musical conservatories, called Shulammith schools, in Jaffa and Jerusalem deserve mention. These schools have contributed greatly to the revival of Jewish music by arranging concerts and issuing collections of old and new songs. An important national school for the promotion of Jewish art is the Bezalel School of Arts and Crafts, founded by the artist Boris Schatz. The subjects taught in the school are carpet weaving, filagree silver work, carving, lithography, lace making, etc.

AGRICULTURAL TRAINING.

The provision for agricultural training, so important for the colonies, is wholly inadequate. The Mikveh Israel Agricultural School, established in 1870 by the Alliance Israélite Universelle, near Jaffa, has an annual budget of about $10,000. The language of instruction is French, the course of study lasts four years, and the curriculum is intended to turn out professional agronomists, who seek positions as inspectors, supervisors, landscape gardeners, and teachers at other schools. As there is no field for these agronomists in Palestine, many graduates go into other callings or leave the country. The Petach-Tikvah Agricultural School, established in 1912, has a very ambitious four years' program which includes Hebrew, French, Arabic, mathematics, history, geography, chemistry, botany, physics, surveying, meteorology, zoology, geology, and mineralogy; soil chemistry, the installing of plantations, cattle raising, medicine, dairying, plant pathology, administration of farms, agrarian law, commercial law, etc. To practical work only two hours a week are assigned. Thus neither the old Mikveh Israel School nor the more recent Petach-Tikvah Agricultural School has succeeded in working out a program suited for the colonies. A unique undertaking is the farm school for girls at Kinneret, near the sea of Tiberias, supported by a Jewish women's organization. Candidates must be at least 17 years old. The pupils enjoy free tuition, board and lodging, as well as a monthly stipend. The work is predominantly practical, the pupils being occupied from seven to nine hours daily. The subjects taught in the first year are botany, elementary chemistry and physics, cooking and preserving, and in the second the elements of

scientific agriculture, fertilizing methods, plant diseases, the principles underlying various crops, poultry raising, cattle breeding, and the care of dairy products. The school has for its use 16 acres of land for ornamental gardening, forestry, and a barnyard. All the work of the farm is done by the pupils, also the sewing and cooking required for the institution.

This was in brief the state of Hebrew education in Palestine before the war broke out. The effects of the war were in many instances disastrous for the newly established school system. Schools were turned into hospitals, teachers were banished, funds failed to arrive, and pupils were driven from place to place. Yet there was a dogged determination to keep the schools open at any cost. This often necessitated the feeding and care of children. When the population was banished from their own homes, schools were opened in the refugee camps. At present a Zionist board of education administers the national schools in Palestine and subsidizes all Jewish schools on two conditions: That Hebrew be the language of instruction and that there be a certain standard of hygiene and sanitation. Funds are supplied from abroad.

ESTABLISHMENT OF A UNIVERSITY.

Every effort is made to organize a unified national Hebrew school system headed by a Hebrew university, where Jewish culture may thrive freely. A higher educational institution is thus far lacking, though Zionists and other Jewish circles have dreamed of such an institution for a number of years. When Russian universities closed their doors to thousands of Jewish students, these were compelled to seek higher education in foreign countries. Many went to Swiss, others to German and French universities. It was then proposed to build a university for Jewish young men and women. But opinions differed. Some chose Switzerland as the land where such a university could flourish. Others who had a definite aim in view and looked forward to the revival of the Jewish culture pointed to Palestine as an appropriate center. Things were unsettled when in July, 1913, negotiations were begun for the purchase of a site in Palestine, but these were necessarily suspended when the war broke out. The declaration of the British Government of November 2, 1917, on behalf of the Jewish home in Palestine gave new impetus to the movement and spurred the Zionists to renewed educational activities. Their efforts have been crowned with success. Palestine is to have a Hebrew university. In March, 1918, a Zionist commission headed by Dr. Weizmann was sent to the Holy Land under the auspices of the British Government. The object of this commission was, among other things, "To inquire into the feasibility of the scheme of establishing a Jewish university." The inquiry

proved so satisfactory that a few months later, i. e., on July 24, 1918, the commission found it advisable to take the initial steps in laying the corner stones of the future university. Representatives of the Christian, Moslem, and Jewish creeds were present at the ceremony, and thus emphasized the cultural value of a higher institution in Palestine. In his speech delivered at the laying of the foundation stones, Dr. Weizmann has defined the new institution as a "Hebrew university," for he continues, "I do not suppose that there is anyone here who can conceive of a university in Jerusalem being other than Hebrew." Speaking further of the program, he thus defines it:

> I have spoken of a Hebrew university where the language will be Hebrew, just as French is used at the Sorbonne or English at Oxford. Naturally other languages, ancient and modern, will be taught in their respective faculties. Amongst these we may expect that prominent attention will be given to Arabic and other Semitic languages. A Hebrew university, though intended primarily for Jews, will, of course, give affectionate welcome to the members of every race and every creed. "My house is a house of prayer for all nations."
>
> Besides the usual schools and institutions which go to form a modern university, it will be peculiarly appropriate to associate with our Hebrew university archæological research, which has revealed so much of the mysterious past of Egypt and of Greece and has a harvest still to be reaped in Palestine. Our university is destined to play an important part in this field of knowledge. Side by side with scientific research the humanities will occupy a distinguished place.

In conclusion Dr. Weizmann pointed out that the Hebrew university, while devoting its activities to the higher scientific achievements, will—

> at the same time be rendered accessible to all classes of the people. The Jewish workman and farm laborer must be enabled to find there a possibility of continuing his education in his free hours; the doors of our libraries, lecture rooms, and laboratories must be opened wide to all. Thus the university will exercise its beneficial influence on the nations as a whole.

Before the political structure of a new nation that is yet old had time to grow, before the foundation of such a structure could be laid or even conceived under existing conditions, there looms thus from the distant Orient a spiritual creation of the Jews, a creation that promises to take a prominent place alongside the great institutions of learning in our own and in other countries.

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